FCC SAR Compliance Test Report

For

Shenzhen Firstnum E-commerce Co.,Ltd

611 BUILDING 11,PHASE II, NANSHAN YUNGU CHUANG YUAN PARK, NO.2 PINGSHAN YI ROAD, PINGSHAN COMMUNITY, TAOYUAN STREET, NANSHAN DISTRICT, SHENZHEN,CHINA

Model: M5

Test Engineer:	Zeng Longhao
Report Number:	WSCT-ANAB-R&E250700062A-SAR
Report Date:	21 August 2025
FCC ID:	2A954-M416
Check By:	Wei Liangmei
Approved By:	Li Huaibi
Prepared By:	World Standardization Certification & Testing Group (Shenzhen) Co., Ltd. Building A-B,Baoli'an Industrial Park,No.58 and 60,Tangtou Avenue, Shiyan Street, Bao'an District, Shenzhen City, Guangdong Province, China Tel: +86-755-26996192 Fax: +86-755-86376605

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Modified History

REV.	Modification Description	Issued Date	Remark
REV.1.0	Initial Test Report Relesse	21 August 2025	Li Huaibi

1 General information

1.1 Notes

The test results of this test report relate exclusively to the test item specified in this test report. Shenzhen Timeway Testing Laboratories does not assume responsibility for any conclusions and generalisations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report is not to be reproduced or published in full without the prior written permission.

1.2 Application details

Date of receipt of test item:	2025-07-20
Start of test:	2025-07-21
End of test:	2025-08-07

1.3 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for FIRSTNUM-M5 is as below:

Band	Position Test Points	MAX Reported SAR_{1g} (W/kg)
GSM850	Body & Hotspot 0mm	0.051
GSM1900	Body & Hotspot 0mm	0.160
UMTS Band 2	Body & Hotspot 0mm	0.717
UMTS Band 4	Body & Hotspot 0mm	0.120
UMTS Band 5	Body & Hotspot 0mm	0.042
LTE Band 2	Body & Hotspot 0mm	1.085
LTE Band 4	Body & Hotspot 0mm	0.294
LTE Band 5	Body & Hotspot 0mm	0.967
LTE Band 7	Body & Hotspot 0mm	0.222
LTE Band 12	Body & Hotspot 0mm	0.868
LTE Band 13	Body & Hotspot 0mm	0.818
LTE Band 17	Body & Hotspot 0mm	0.839
LTE Band 25	Body & Hotspot 0mm	0.996
LTE Band 26	Body & Hotspot 0mm	1.089
LTE Band 26	Body & Hotspot 0mm	1.115
LTE Band 38	Body & Hotspot 0mm	0.728
LTE Band 41	Body & Hotspot 0mm	0.673
LTE Band 66	Body & Hotspot 0mm	1.256
Wi-Fi 2.4G	Body & Hotspot 0mm	0.104
Maximum Max. SAR Level(s) Measured: (Limit: 1.6W/Kg):	LTE Band 66	1.256W/kg1gBodyTissue
	Wi-Fi 2.4G	0.104W/kg1gBodyTissue
The Body highest simultaneous SAR :		1.360W/kg1gBodyTissue

The device is in compliance with Specific Absorption Rate （SAR）for general population/uncontraolled exposure limits of 1.6 W/Kg as averaged over any 1g tissue according to the FCC rule the ANSI/IEEE C95.1:2005, the NCRP Report Number 86 for uncontrolled environment, according to the Industry Canada Radio Standards Specification RSS-102 for General Population/Uncontrolled exposure, and had been tested in accordance with the measurement methods and procedures specified in IEEE Std 1528-2013.

1.4 EUT Information

Device Information：			
Product Type:	4G MIFI		
Model:	FIRSTNUM-M5		
Series models:	M416 FIRSTNUM-M1 to M20		
Trade Mark:	FIRSTNUM/Stoneoim/VPLUS/SignalHive		
Software number:	1.02ME/FN		
Hardware number:	EZ01M3_MB_V1.0		
Device Type:	Portable device		
Exposure Category:	uncontrolled environment / general population		
Production Unit or Identical Prototype：	Production Unit		
Antenna Type :	Integral Antenna		
Device Operating Configurations:			
Supporting Mode(s) :	GSM850, PCS 1900 WCDMA B2/ 4/ 5 LTE Band 2/ 4/ 5/ 7/ 12/ 13/ 25/ 26/ 38/ 40/41/66		
Modulation:	GSM/GPRS: GMSK EGPRS: 8PSK WCDMA: QPSK HSDPA/HSUPA: QPSK /16QAM LTE: QPSK/16QAM DSSS (DBPSK, DQPSK, CCK) for IEEE 802.11b OFDM (BPSK,QPSK,16QAM,64QAM,256QAM,1024QAM) for IEEE 802.11g/n/ax		
Device Class :	Class B, No DTM Mode		
Operating Frequency Range(s)	Band	TX(MHz)	RX(MHz)
	GSM850	824~849	869~894
	GSM1900	1850~1910	1930~1990
	UMTS Band 2	1850~1910	1930~1990
	UMTS Band 4	1710~1755	2110~2155
	UMTS Band 5	824~849	869~894
	LTE Band 2	1850~1910	1930~1990
	LTE Band 4	1710~1755	2110~2155
	LTE Band 5	824~849	869~894
	LTE Band 7	2500~2570	2620~2690
	LTE Band 12	699~716	729~746
	LTE Band 13	777-787	746-756
	LTE Band 17	704-716	734~746
	LTE Band 25	1850-1915	1930-1995
	LTE Band 26	814~824	859~869
	LTE Band 26	824~849	869~894

Operating Frequency Range(s)	LTE Band 38	2570-2620	2570-2620
	LTE Band 41	2496-2690	2496-2690
	LTE Band 66	1710-1780	2110-2200
	Wi-Fi (2.4G)	2412-2462	
Antenna gain:	GSM 850/WCDMA B5/LTE B5: 0.79dbi PCS 1900/WCDMA B2/LTE B2: 2.28dbi WCDMA B4/LTE B4: 3.21dbi LTE B7: 2.5dbi LTE B12/LTE B17:-4.16dbi LTE B13: -2.77dbi LTE B25: 2.28dbi LTE B26: 0.79dbi LTE B38: 2.46dbi LTE B41: 2.53dbi LTE B66: 3.33dbi		
Radiated Power (EIRP/ERP) Limit	GSM 850/WCDMA B5/LTE B5/LTE B26：7.00W(38.45dBm) PCS 1900/WCDMA B2/LTE B2:2.00W(33.01dBm) WCDMA B4/LTE B4/LTE B66: 1.00W(30.00dBm) LTE B7/LTE B25/LTE B38/LTE B41: 2.00W(33.01dBm) LTE B12/LTE B13/LTE B17: 3.00W(34.77dBm)		
Power Source:	Rechargeable Li-ion Polymer Battery: 675464ART Rated Voltage: 3.7V Limited Charge Voltage: 4.2V Rated Capacity: 3000mAh/11.1Wh		

Note：

1. The EUT is a 4G MIFI, supporting dual SIM card slots under the same transceiver. Both SIM card slots support GSM, WCDMA, LTE and both SIM card slots share the same transceiver, so only SIM1 is tested in this report.
2. The antenna gain provided by the applicant, and the laboratory will not be responsible for the accumulated calculation results which covers the information provided by the applicant.
3. N/A stands for no applicable.
4. Antenna gain provided by the customer.

2 Testing laboratory

Test Site	World Standardization Certification & Testing Group (Shenzhen) Co., Ltd.
Laboratory:	Building A-B,Baoli'an Industrial Park,No.58 and 60,Tangtou Avenue, Shiyan Street, Bao'an District, Shenzhen City, Guangdong Province, China
TEL:	+86-755-26996192
FAX:	+86-755-86376605

3 ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025:2017.

USA	**ANAB - Certificate Number: AT-3951**
China	**CNAS (Registration Number: L3732)**
Canada	**ISED(CAB identifier:CN0178)**

Copies of granted accreditation certificates are available for downloading from our web site, http://www.wsct-cert.com

4 Test Environment

	Required	Actual
Ambient temperature:	18 – 25 °C	22 ± 2 °C
Tissue Simulating liquid:	22 ± 2 °C	22 ± 2 °C
Relative humidity content:	30 – 70 %	30 – 70 %

5 Applicant and Manufacturer

Applicant/Client Name:	Shenzhen Firstnum E-commerce Co.,Ltd
Applicant Address:	611 BUILDING 11,PHASE II, NANSHAN YUNGU CHUANG YUAN PARK, NO.2 PINGSHAN YI ROAD, PINGSHAN COMMUNITY, TAOYUAN STREET, NANSHAN DISTRICT, SHENZHEN,CHINA
Manufacturer Name:	Shenzhen Firstnum E-commerce Co.,Ltd
Manufacturer Address:	611 BUILDING 11,PHASE II, NANSHAN YUNGU CHUANG YUAN PARK, NO.2 PINGSHAN YI ROAD, PINGSHAN COMMUNITY, TAOYUAN STREET, NANSHAN DISTRICT, SHENZHEN,CHINA

6 Test standards:

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	IEC/IEEE 62209-1528	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate in the Human Head from Wireless Communications Devices: Measurement Techniques
3	KDB447498 D04	Interim General RF Exposure Guidance v01
4	KDB865664 D01	SAR measurement 100MHz to 6GHz v01r04
5	KDB865664 D02	RF Exposure Reporting v01r02
6	KDB941225 D01	3G SAR Procedures v03r01
7	KDB941225 D05	SAR for LTE Devices v02r05
	KDB941225 D06	Hotspot Mode v02r01
8	KDB248227 D01	802.11 Wi-Fi SAR v02r02
9	KDB941225 D06	Hotspot Mode v02r01
10	KDB648474 D04	Handset SAR v01r03
11	KDB690783 D01	SAR Listings on Grant v01r03

6.1 RF exposure limits

Human Exposure	Uncontrolled Environment General Population	Controlled Environment Occupational
Spatial Peak SAR* (Brain/Body/Arms/Legs)	1.60 mW/g	8.00 mW/g
Spatial Average SAR** (Whole Body)	0.08 mW/g	0.40 mW/g
Spatial Peak SAR*** (Heads/Feet/Ankle/Wrist)	4.00 mW/g	20.00 mW/g

The limit applied in this test report is shown in bold letters

Notes:

* The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

** The Spatial Average value of the SAR averaged over the whole body.

*** The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

Controlled Environments are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation.

6.2 SAR Definition

Specific Absorption Rate is defined as the time derivative (rate) of the incremental energy (dW) absorbed by(dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density (ρ).

$$SAR = \frac{d}{dt}\left(\frac{dW}{dm}\right) = \frac{d}{dt}\left(\frac{dW}{\rho dV}\right)$$

SAR is expressed in units of watts per kilogram (W/kg). SAR can be related to the electric field at a point by

$$SAR = \frac{\sigma |E|^2}{\rho}$$

where:

σ = conductivity of the tissue (S/m)

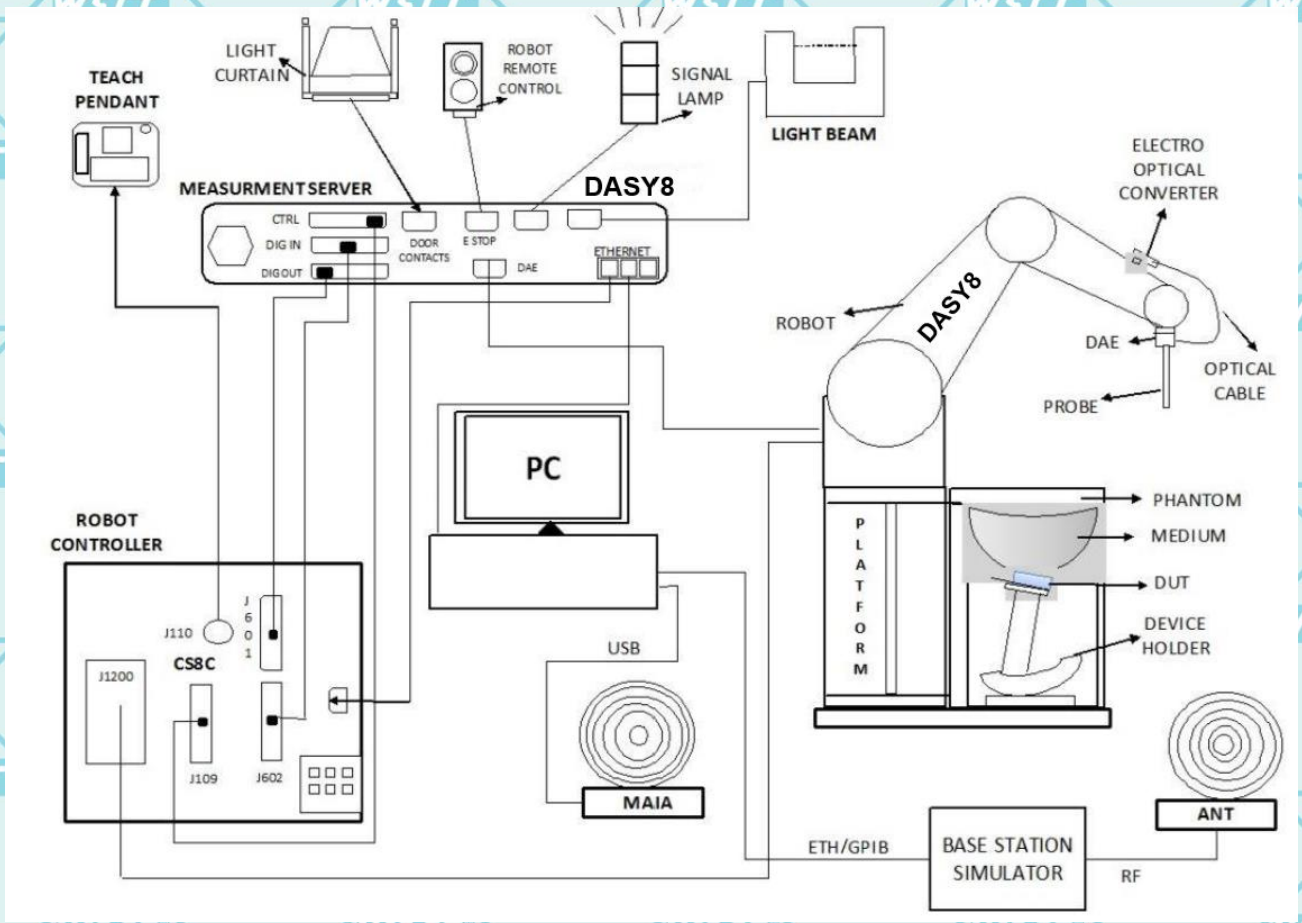
ρ = mass density of the tissue (kg/m^3)

E = rms electric field strength (V/m)

7 SAR Measurement System

7.1 The Measurement System

DASY8 is a flexible, high-precision near-field scanner optimized for automated measurements in free-space and tissue simulating liquids (TSL), using the most advanced probes covering the frequency range from 3 kHz to 110 GHz. The software enables point, area, and volume measurements and conformal scanning of complex geometries.



The DASY8 SAR module consists of an isotropic dosimetric probe (SAR) mounted on the TX2 precision robot, which allows field scanning inside anthropomorphic phantoms filled with tissue-simulating liquids. The probes are miniaturized, sensitive, isotopic, linear, stable and calibrated with precise boundary compensation. The spatial accuracy of probe positioning within the phantom is better than 0.2 mm. Scanning is optimized and adaptive to the induced field. The spatial SAR peak is determined without reconstruction.

7.2 Robot

The DASY8 system uses the high-precision industrial robots TX2-60L and TX2-90XL from Stäubli SA (France). The TX2 family of robots provides the ideal combination of speed, rigidity, size, and precision:

- High precision (repeatability 0.03 mm)
- High reliability and low maintenance costs (industrial design)
- ELF interference (motor control fields are shielded by the closed metallic construction)
- Hygienic encapsulated 6-axis arm enabled by a hollow shaft gearbox, no external cables.

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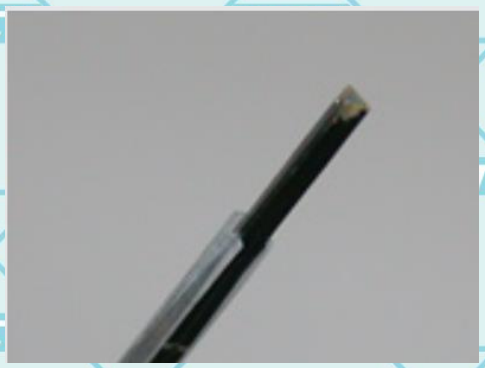
7.3 Probe

The SAR measurement is conducted with the dosimetric probe (manufactured by SPEAG).The probe is specially designed and callbrated for use in liquid with high pemitivity. The dosimetric probe has special calibration in liquid at different frequency. This probe has a built in optical surface detection system to prevent from collision with phantom.

For the measurements the Specific Dosimetric E-Field Probe EX3DV4-SN:7895&7391 with following specifications is used



Frequency: 4MHz – 10GHz ;
Linearity: ±0.2dB (30MHz – 10GHz)

Dynamic Range: 10μW/g–>100 mW/g
Linearity: ±0.2dB (noise: typically <1μW/g)

Directivity (typical): ±0.1 dB in TSL (rotation around probe axis)
±0.3 dB in TSL (rotation normal to probe axis)

Sensor Arrangement	Triangular
Connector Angle	46.9°
Probe Overall Length	337mm
Probe Body Diameter	10mm
Tip Length	9mm
Tip Diameter	2.5mm
Probe Tip to Sensor X Calibration Point	1mm
Probe Tip to Sensor Y Calibration Point	1mm
Probe Tip to Sensor Z Calibration Point	1mm
Recommended Measurement Distance from Surface	1.4mm

7.4 DAE

DAE4ip– Data Acquisition Electronics 4 with Integrated Power

Data Acquisition Electronics 4 with an integrated power supply for time unlimited measurements.

Performance:

- Measurement range: -100–+300 mV (16-bit resolution and two range settings: 4 mV, 400 mV)
- Input offset voltage:<5µV (with auto zero)
- Input resistance:200MOhm
- Input bias current:<50 FA
- Power supply: integrated (from the DASY8 measurement server)
- Dimensions(L × W × H):60×60×68 mm
- Calibration: ISO/IEC 17025 calibration service available.

7.5 Phantom

The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEC/IEEE 62209-1528. It enables the dosimetric evaluation of left—and right-hand phone usage as well as body-mounted usage at the flat phantom region. A cover prevents the liquid from evaporating. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by teaching three points with the robot.

Material	Vinyl ester, fiberglass reinforced (VE-GF)
Liquid Compatibility	The phantom shell is compatible with SPEAG's tissue-simulating liquids (sugar and oil-based). However, using other liquids may render the phantom warranty void (see note or consult SPEAG support).
Shell Thickness	2 ± 0.2mm (6 ± 0.2mm at ear point)
Dimensions (incl. Wooden Support)	Length:1000 mm Width: 500 mm Height: adjustable feet
Filling Volume	approx.25 liters
Support	DASY6/8: standard-size platform slot DASY52 stand-alone: SPEAG standard phantom table
Accessories	Mounting Device and Adaptors

7.6 Device Holder

The DASY instrument holder is designed to accommodate the various positions specified in the standard. It has two scales for instrument rotation (with respect to the body axis) and instrument tilt (with respect to the line between the ear reference points). The center of rotation for both scales is the Ear Reference Point (ERP). This eliminates the need to reposition the instrument when changing angles.

The DASY instrument holder is made of low-loss POM material with the following dielectric parameters: relative permittivity ε=3 and loss tangent δ=0.02. The amount of dielectric material in the immediate vicinity of the device was reduced because measurements indicated that the influence of the clamp on the test results could be reduced.

Device holder

The positioning system allows obtaining cheek and tilting position with a very good accuracy. In compliance with CENELEC, the tilt angle uncertainty is lower than 1°.

7.7 SAR Scan General Requirement

According to kdb865664 D01 v01r04:

Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1-g SAR.Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std 1528-2013.The area and zoom scan resolutions specified in the table below must be applied to the SAR measurements and fully documented in SAR reports, unless further guidance has been provided by the FCC.

<table>
<tr><td colspan="3"></td><td>≤ 3 GHz</td><td>>3 GHz</td></tr>
<tr><td colspan="3">Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface</td><td>5 mm ± 1 mm</td><td>½ δ ln(2) mm ±0.5 mm</td></tr>
<tr><td colspan="3">Maximum probe angle from probe axis to phantom surface normal at the measurement location</td><td>30° ± 1°</td><td>20° ± 1°</td></tr>
<tr><td colspan="3" rowspan="2">Maximum area sean spatial resolution: Δ x Area , Δy Area</td><td>≤2 GHz: ≤ 15 mm
2-3 GHz: ≤ 12 mm</td><td>3- 4 GHz: ≤ 12 mm
4- 6 GHz: ≤10 mm</td></tr>
<tr><td colspan="2">When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.</td></tr>
<tr><td colspan="3">Maximum zoom scan spatial resolution: ΔxZoom , ΔyZoom</td><td>≤ 2 GHz: ≤ 8 mm
2-3 GHz: ≤ 5 mm*</td><td>3- 4 GHz: ≤5 mm*
4- 6 GHz: ≤ 4 mm*</td></tr>
<tr><td rowspan="3">Maximum zoom scan spatial resolution, normal to phantom surface</td><td colspan="2">uniform grid: Δz Zoom (n)</td><td>≤5 mm</td><td>3- 4 GHz: ≤4 mm
4- 5 GHz: ≤ 3 mm
5- 6 GHz: ≤ 2 mm</td></tr>
<tr><td rowspan="2">graded grid</td><td>Δ zZoom (1): between 1 st two points closest to phantom surface</td><td>≤4 mm</td><td>3-4 GHz: ≤ 3 mm
4-5 GHz: ≤ 2.5 mm
5-6 GHz: ≤ 2 mm</td></tr>
<tr><td>Δ zZoom (n>1): between subsequent points</td><td colspan="2">≤1.5·ΔzZoom (n-1) mm</td></tr>
<tr><td>Minimum zoom scan volume</td><td colspan="2">x, y,z</td><td>≥30 mm</td><td>3 -4 GHz: ≥ 28 mm
4- 5 GHz: ≥ 25 mm
5- 6 GHz: ≥ 22 mm</td></tr>
<tr><td colspan="5">Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see IEEE Std 1528-2013 for details.
* When zoom scan is required and the reported SAR from the area scan based 1-g SAR estimation procedures of KDB Publication 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.</td></tr>
</table>

7.8 Measurement procedure

Power Drift :

All SAR tests were performed with a fully charged battery under the DUT and transmitting at maximum output power. The DASY measurement software uses the power reference measurement and power drift measurement procedures to monitor the power drift of the DUT during SAR testing. Both methods measure the field value at a specified reference position before and after the SAR test. The software calculates the field difference in dB. If the power drift exceeds 5%, the SAR is retested.

Area scan:

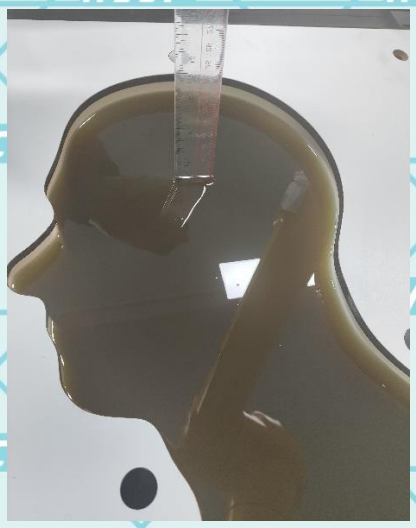
All antennas and radiating structures that may contribute to the measured SAR or influence the SAR distribution must be included in the area scan. The areas of the transmitter(s), antenna(s) and host device, when projected onto the phantom, must be within the area scan measurement region. The area scan measurement resolution must enable the extrapolation algorithms of the SAR system to correctly identify the peak SAR location(s) for subsequent zoom scan measurements to correctly determine the 1-g SAR. Area scans are performed at a constant distance from the phantom surface, determined by the measurement frequencies.

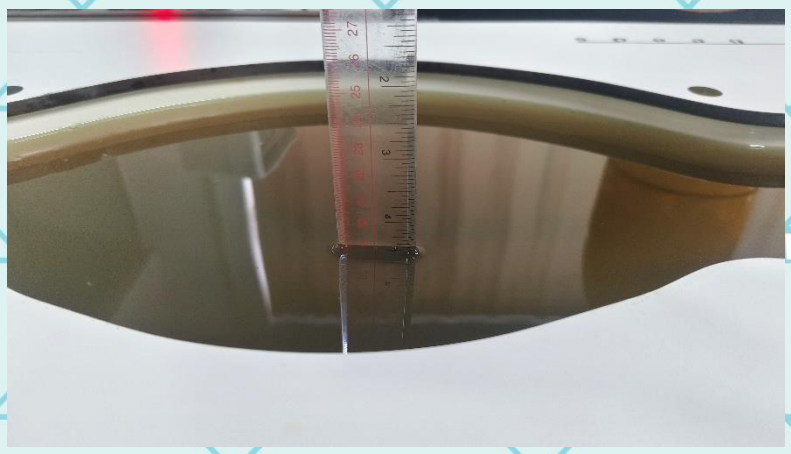
Zoom Scan:

Except when area scan based 1-g SAR estimation applies, a zoom scan measurement is required at the highest peak SAR location determined in the area scan to determine the 1-g SAR. When the 1-g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR. The zoom scan volume must be larger than the required minimum dimensions described 7.7. There must be at least one measurement point within the first 5 mm from the phantom surface for measurements ≤ 3 GHz, two measurement points for measurements ≤ 5 GHz and three measurement points for measurements above 5 GHz.When graded grids are used, which only applies in the direction normal to the phantom surface, the initial grid separation closest to the phantom surface and subsequent graded grid increment ratios must satisfy the required protocols in 7.7 .The 1-g SAR averaging volume must be fully contained within the zoom scan measurement volume oundaries;otherwise, the measurement must be repeated by shifting or expanding the zoom scan volume. The similar requirements also apply to 10-g SAR measurements.

7.9 Tissue simulating liquids: dielectric properties

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. The simulating liquids should be checked at the beginning of a series of SAR measurements to determine of the dielectic parameter are within the tolerances of the specified target values. The measured conductivity and relative permittivity should be within ± 5% of the target values.





Simulating Head Liquid for 5G(HBBL600-10000MHz V6), Manufactured by SPEAG:

Ingredients	(% by weight)
Water	50-65%
Mineral oil	10-30%
Emulsifiers	8-25%
Sodium salt	0-1.5%

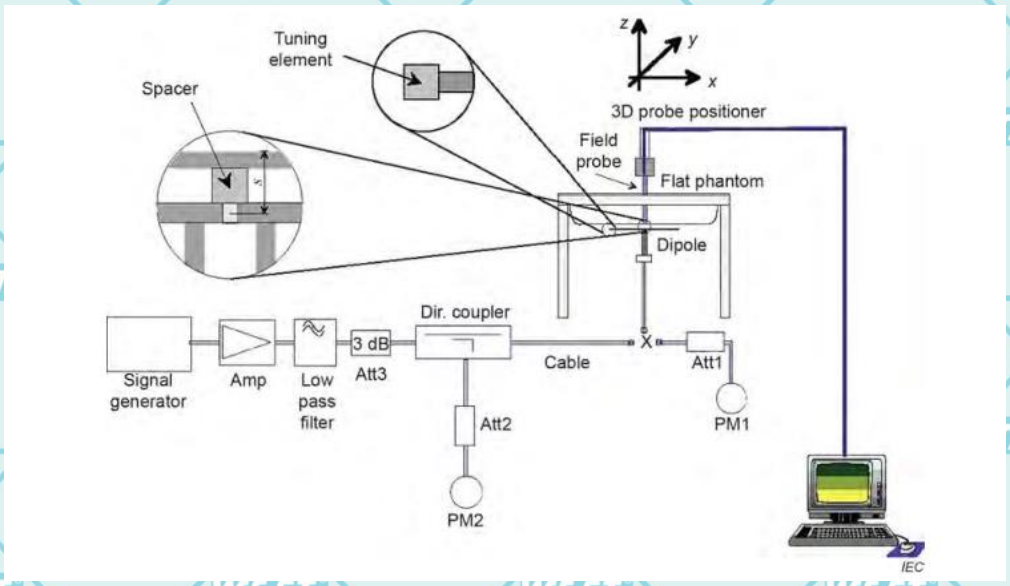
7.10 Tissue simulating liquids: parameters

Used Target Frequency	Target Tissue		Measured Tissue		Liquid Temp.	Test Date
	ε_r (+/-5%)	σ (S/m) (+/-5%)	ε_r	σ (S/m)		
750MHz Head	41.90 (39.805~43.995)	0.89 (0.85~0.93)	43.90	0.885	21.6°C	2025-07-21
835MHz Head	41.50 (39.425~43.575)	0.90 (0.86~0.95)	41.60	0.914	21.6°C	2025-07-23
1750MHz Head	40.10 (38.10~42.10)	1.37 (1.31~1.43)	41.90	1.34	21.6°C	2025-07-25
1900MHz Head	40.00 (38.00~42.00)	1.40 (1.33~1.47)	41.70	1.44	21.6°C	2025-07-28
2450MHz Head	39.20 (37.24~41.16)	1.80 (1.71~1.89)	40.27	1.82	21.6°C	2025-07-30
2550MHz Head	39.10 (37.15~41.05)	1.91 (1.82~2.01)	40.80	1.90	21.6°C	2025-08-02
2600MHz Head	39.00 (37.05~40.95)	1.96 (1.86~2.05)	39.87	1.94	21.6°C	2025-08-05
ε_r= Relative permittivity, σ= Conductivity						

8 System Check

8.1 System check procedure

The System check is performed by using a System check dipole which is positioned parallel to the planar part of the SAM phantom at the reference point. The distance of the dipole to the SAM phantom is determined by a spacer. The dipole is connected to the signal source consisting of signal generator and amplifier via a directional coupler, N-connector cable and adaption to SMA. It is fed with a power of 100 mW. To adjust this power a power meter is used. The power sensor is connected to the cable before the System check to measure the power at this point and do adjustments at the signal generator. At the outputs of the directional coupler both return loss as well as forward power are controlled during the validation to make sure that emitted power at the dipole is kept constant. This can also be checked by the power drift measurement after the test (result on plot).
System check results have to be equal or near the values determined during dipole calibration (target SAR in table above) with the relevant liquids and test system.



8.2 System check results

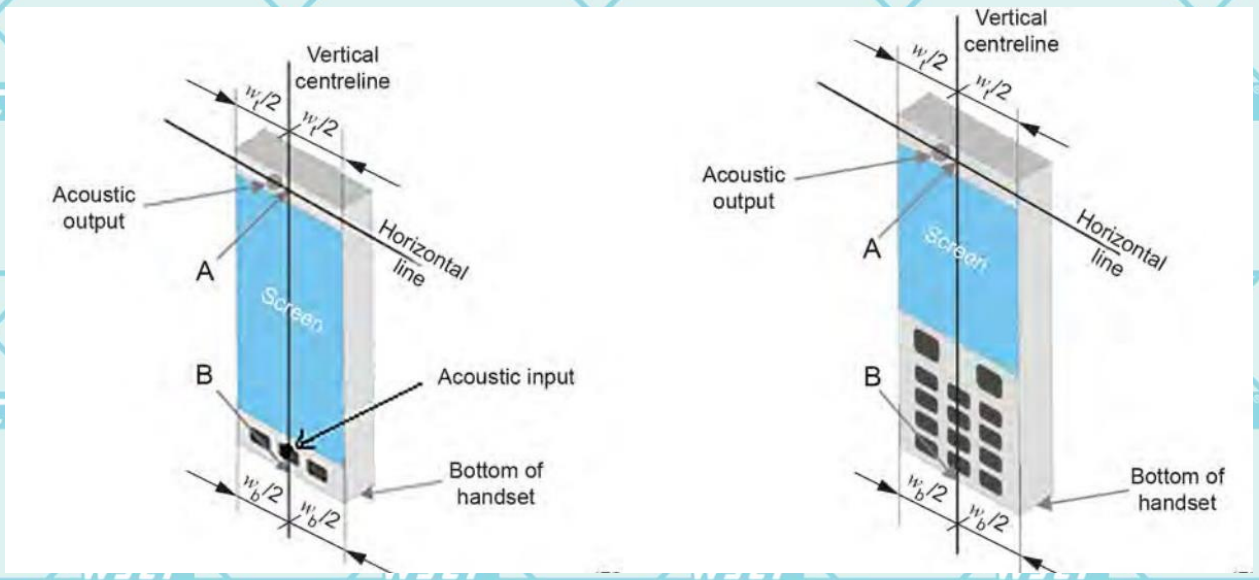
The system Check is performed for verifying the accuracy of the complete measurement system and performance of the software.The following table shows System check results for all frequency bands and tissue liquids used during the tests (plot(s) see annex A).

System Check	Target SAR (1W) (+/-10%)		Measured SAR (Normalized to 1W)		Liquid Temp.	Test Date
	1-g (W/kg)	10-g (W/kg)	1-g (W/kg)	10-g (W/kg)		
D750V3 Body	8.46 (7.62~9.30)	5.70 (5.13~6.27)	8.58	5.70	21.6°C	2025-07-21
D835V2 Body	9.68 (8.72~10.64)	6.44 (5.80~7.08)	9.94	6.55	21.6°C	2025-07-23
D1750V2 Body	36.40 (32.76~40.04)	19.60 (17.64~21.56)	36.20	19.50	21.6°C	2025-07-25
D1900V2 Body	39.70 (35.73~43.67)	21.00 (18.90~23.10)	40.40	21.10	21.6°C	2025-07-28
D2550V2 Body	54.10 (48.69~59.51)	24.70 (22.23~27.17)	55.80	25.60	21.6°C	2025-08-02
Note: 1.All SAR values are normalized to 1W forward power. 2. The actual forward power output to the dipole antenna is 20dbm(100mw), so the measured value differs ten times from the table						

9 Test Position Configurations

9.1 Head Exposure Conditions

According to the IEEE-1528, the head phantom needs to test both "Cheek" and "Tilt" positions
Configure the DUT for voice operation, if necessary. For example, for a DUT with a flip,swivel, or slide cover piece, open the cover if this is consistent with voice operation. If the DUT can also be used with the cover closed, both configurations shall be tested.
Define two imaginary lines on the DUT, the vertical centreline and the horizontal line,relative to the DUT in vertical orientation as shown in Figure
The vertical centreline passes through two points on the front side of the DUT: the midpoint of the width wt of the DUT at the level of the acoustic output (Point A in Figure), and the midpoint of the width w b at the bottom of the DUT (Point B). The horizontal line is perpendicular to the vertical centerline, and passes through the centre of the acoustic output (Figure). The two lines intersect at Point A. Note that for many DUTs, Point A coincides with the centre of the acoustic output. However, the acoustic output could be located elsewhere on the horizontal line. Also note that the vertical centreline is not necessarily parallel to the front face of the DUT, especially for clamshell DUTs, DUTs with flip cover pieces, and other irregularly shaped DUTs.



Vertical and horizontal reference lines and reference points A and B on two example device types: a full touch-screen smart phone (left) and a DUT with a keypad (right)

wt Width of the DUT at the level of the acoustic output
wb Width of the bottom of the DUT
A Midpoint of the width wt of the DUT at the level of the acoustic output
B Midpoint of the width wb of the bottom of the DUT

Cheek position:

Position the DUT close to the surface of the phantom such that Point A is on the (virtual)extension of the line passing through points RE (right-ear ear reference point) and LE(left-ear ear reference point) on the phantom The plane determined by the vertical centreline and the horizontal line of the DUT shall be parallel to the sagittal plane of the phantom.

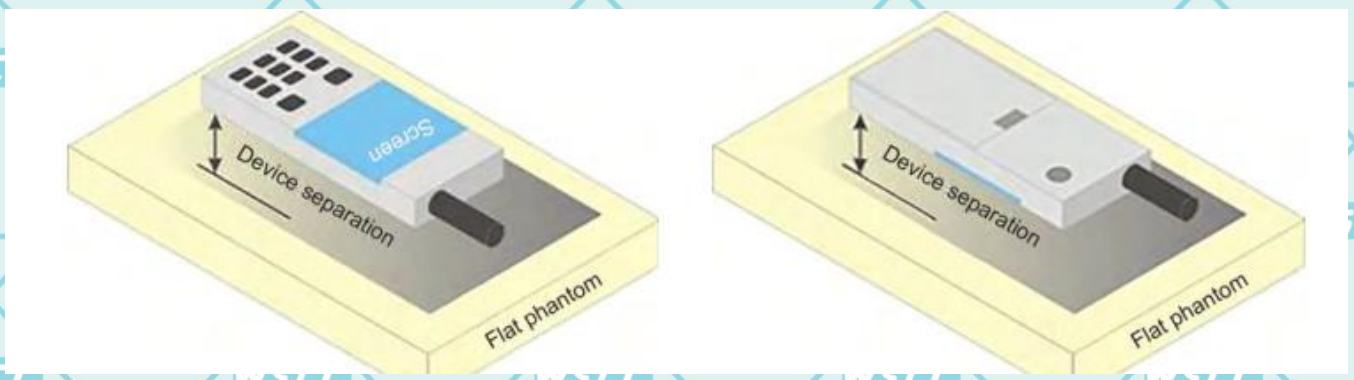
Tilt position:

Place the DUT in the cheek position. While maintaining the orientation of the DUT, move the DUT away from the pinna along the line passing through RE and LE far enough to allow a rotation of the DUT away from the cheek by 15°. Rotate the DUT around the horizontal line by 15°

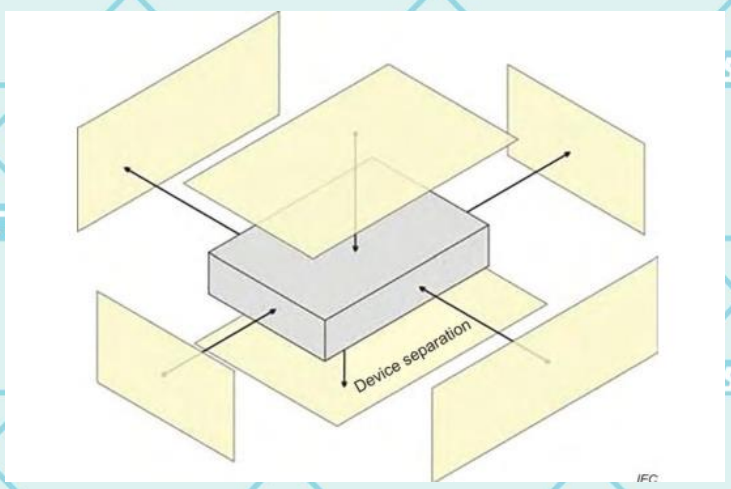
While maintaining the orientation of the DUT, move the DUT towards the phantom on a line passing through RE and LE until any part of the DUT touches the ear. The tilt position is obtained when the contact is on the pinna. If the contact is at any location other than the pinna, e.g. an extended antenna in contact with the back of the head phantom, the angle of the DUT shall be reduced. In this case, the tilt position is obtained if any part of the DUT is in contact with the pinna and a second point on the DUT is in contact with the phantom, e.g. the antenna in contact with the back of the head.

9.2 Body Exposure Condition

According to 447498 D04
Devices that support transmission while used with body-worn accessories must be tested for SAR compliance related to each body-worn condition of use. SAR evaluation is required for body-worn accessories supplied with the device they are attached to.
The general informing principle is that the selected test configurations must conservatively capture the various body-worn accessory use conditions expected by users. For instance, devices that are designed to operate on the body of users using lanyards and straps, or without requiring additional body-worn accessories, must be tested for SAR compliance using a conservative minimum test separation distance not to exceed 5 mm for all use conditions required by the device.



Test positions for body-worn devices



Possible test positions for a generic device

Testing of all six faces of the DUT (see Figure) might not be required; justification shall be provided when omitting testing of some faces.

10 SAR Test Configuration

10.1 GSM Test Configurations

SAR tests for GSM850 and GSM1900, a communication link is set up with a base station by air link. Using CMU200 the power lever is set to “5”and “0” in SAR of GSM850 and GSM1900. The tests in the band of GSM 850 and GSM 1900 are performed in the mode of GPRS/EGPRS function. Since the GPRS class is 12 for this EUT, it has at most 4 timeslots in uplink and at most 4 timeslots in downlink, the maximum total timeslot is 5.
When SAR tests for EGPRS mode is necessary, GMSK modulation should be used to minimize SAR measurement error due to higher peak-to-average power (PAR) ratios inherent in 8-PSK.

10.2 UMTS Test Configuration

1) Output Power Verification
Maximum output power is verified on the high, middle and low channels according to procedures described in section 5.2 of 3GPP TS 34.121, using the appropriate RMC or AMR with TPC (transmit power control) set to all “1”s” for WCDMA/HSDPA or by applying the required inner loop power control procedures to maintain maximum output power while HSUPA is active. Results for all applicable physical channel configurations (DPCCH, DPDCHn and spreading codes, HSDPA, HSPA) are requied in the SAR report. All configurations that are not supported by the Headset or cannot be measured due to technical or equipment limitations must be clearly identified.
2) WCDMA
a. Head SAR Measurements
SAR for next to the ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all “1”s”. The 3G SAR test reduction procedure is applied to AMR configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for 12.2 kbps AMR in 3.4 kbps SRB (signaling radio bearer) using the highest reported SAR configuration in 12.2 kbps RMC for head exposure.
b. Body SAR Measurements
SAR for body-worn accessory configurations is measured using a 12.2 kbps RMC with TPC bits configured to all “1”s”. The 3G SAR test reduction procedure is applied to other spreading codes and multiple DPDCHn configurations supported by the Headset with 12.2 kbps RMC as the primary mode
3) HSDPA
SAR for body exposure configurations is measured according to the “Body SAR Measurements”” procedures of 3G device. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode. This is referred to as the 3G SAR test reduction procedure in the following SAR test guidance, where the primary mode is identified in

the applicable wireless mode test procedures and the secondary mode is wireless mode being considered for SAR test reduction by that procedure. When the 3G SAR test reduction procedure is not satisfied, it is identified as “otherwise” in the applicable procedures; SAR measurement is required for the secondary mode.

Per KDB941225 D01, the 3G SAR test reduction procedure is applied to HSDPA body configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSDPA using the HSDPA body SAR procedures for the highest reported SAR body exposure configuration in 12.2 kbps RMC. HSDPA should be configured according to UE category of a test device. The number of HS-DSCH/HS-PDSCHs, HAPRQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission condition, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4ms with a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. The βc andβd gain factors for DPCCH and DPDCH were set according to the values in the below table, hs for HS-DPCCH is set automatically to the correct value when ΔACK, ΔNACK, ΔCQI = 8. The variation of the βc /βd ratio causes a power reduction at sub-tests 2 - 4.

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs} (1)	CM(dB)(2)	MPR (dB)
1	2/15	15/15	64	2/15	4/15	0.0	0
2	12/15(3)	15/15(3)	64	12/15(3)	24/15	1.0	0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: ΔACK, ΔNACK and ΔCQI = 8 $A_{hs} = \beta_{hs}/\beta_c = 30/15$ $\beta_{hs} = 30/15 * \beta_c$

Note 2 : CM=1 for β_c/β_d= 12/15, β_{hs}/β_c = 24/15. For all other combinations of DPDCH,DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 3 : For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1,TF1) to β_c = 11/15 and β_d = 15/15

The measurements were performed with a Fixed Reference Channel (FRC) and H-Set 1 QPSK.:

Parameter	Value
Nominal average inf. bit rate	534 kbit/s
Inter-TTI Distance	3 TTI's
Number of HARQ Processes	2 Processes
Information Bit Payload	3202 Bits
MAC-d PDU size	336 Bits
Number Code Blocks	1 Block
Binary Channel Bits Per TTI	4800 Bits
Total Available SMLs in UE	19200 SMLs
Number of SMLs per HARQ Process	9600 SMLs
Coding Rate	0.67
Number of Physical Channel Codes	5

4)HSUPA
SAR for body exposure configurations is measured according to the “Body SAR Measurements”” procedures of 3G device. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.
Per KDB941225 D01v03, the 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSPA using the HSPA body SAR procedures for the highest reported body exposure SAR configuration in 12.2 kbps RMC.

10.3 LTE Test Configuration

SAR for LTE band exposure configurations is measured according to the procedures of KDB 941225 D05 SAR for LTE Devices. The CMW500 WideBand Radio Communication Tester was used for LTE output power measurements and SAR testing. Closed loop power control was used so the UE transmits with maximum output power during SAR testing.SAR test were performed with the same number of RB and RB offsets transmitting on all TTI frames(Maximum TTI)
1) Spectrum Plots for RB configurations
A properly configured base station simulator was used for LTE output power measurements and SAR testing.Therefore, spectrum plots for RB configurations were not required to be included in this report.
2) MPR
When MPR is implemented permanently within the UE, regardless of network requirements, only those RB configurations allowed by 3GPP for the channel bandwidth and modulation combinations may be tested with MPR active. Configurations with RB allocations less than the RB thresholds required by 3GPP must be tested without MPR.
The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3

Modulation	Channel bandwidth / Transmission bandwidth (RB)						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

3) A-MPR
A-MPR(Additional MPR) has been disabled for all SAR tests by using Network Signalling Value of “NS_01”on the base station simulator.

4) LTE procedures for SAR testing

A) Largest channel bandwidth standalone SAR test requirements

i) QPSK with 1 RB allocation

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.

ii) QPSK with 50% RB allocation

The procedures required for 1 RB allocation in i) are applied to measure the SAR for QPSK with 50% RB allocation.

iii) QPSK with 100% RB allocation

For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation in i) and ii) are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.

iv) Higher order modulations

For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in above sections to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is > ½ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

B) Other channel bandwidth standalone SAR test requirements

For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in section A) to determine the channels and RB configurations that need SAR testing and only measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is > ½ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.

5) TDD LTE test configuration

According to KDB 941225 D05 SAR for LTE Devices v02r04, for Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

10.4 Wi-Fi Test Configuration

For the 802.11b/g SAR tests, a communication link is set up with the test mode software for Wi-Fi mode test. The Absolute Radio Frequency Channel Number(ARFCN) is allocated to 1 ,6 and 11 respectively in the case of 2450 MHz.During the test,at the each test frequency channel, the EUT is operated at the RF continuous emission mode. Each channel should be tested at the lowest data rate. 802.11b/g operating modes are tested independently according to the service requirements in each frquency band. 802.11b/g modes are tested on channel 1, 6, 11; however,if output power reduction is necessary for channels 1 and/or 11 to meet restricted band requirements the highest output channel closest to each of these channels must be tested instead.

SAR is not required for 802.11g/n channels when the maximum average output power is less than 0.25dB higher than that measured on the corresponding 802.11b channels.

Mode	Band	GHz	Channel	"Default Test Channels"	
				802.11b	802.11g
802.11b/g	2.4 GHz	2412	1#	√	△
		2437	6	√	△
		2462	11#	√	△

Notes:

√ = "default test channels"

△= possible 802.11g channels with maximum average output ¼ dB the "default test channels"

= when output power is reduced for channel 1 and /or 11 to meet restricted band requirements the highest output channels closest to each of these channels should be tested.

802.11 Test Channels per FCC Requirements

10.5 WiFi 2.4G SAR Test Procedures

Separate SAR procedures are applied to DSSS and OFDM configurations in the 2.4 GHz band to simplify DSSS test requirements. For 802.11b DSSS SAR measurements, DSSS SAR procedure applies to fixed exposure test position and initial test position procedure applies to multiple exposure test positions.

A)802.11b DSSS SAR Test Requirements

SAR is measured for 2.4 GHz 802.11b DSSS using either a fixed test position or, when applicable, the initial test position procedure. SAR test reduction is determined according to the following:

1) When the reported SAR of the highest measured maximum output power channel (section 3.1 of of KDB 248227D01v02) for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.

2) When the reported SAR is > 0.8 W/kg, SAR is required for that exposure configuration using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.

B) 2.4GHz 802.11g/n OFDM SAR Test Exclusion Requirements

When SAR measurement is required for 2.4 GHz 802.11g/n OFDM configurations, the measurement and test reduction procedures for OFDM are applied (section 5.3 of of KDB 248227D01v02r01). SAR is not required for the following 2.4 GHz OFDM conditions.

1) When KDB Publication 447498 SAR test exclusion applies to the OFDM configuration.

2) When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.

C) SAR Test Requirements for OFDM configurations

When SAR measurement is required for 802.11 g/n OFDM configurations, each standalone and frequency aggregated band is considered separately for SAR test reduction. In applying the initial test configuration and subsequent test configuration procedures, the 802.11 transmission configuration with the highest specified maximum output power and the channel within a test configuration with the highest measured maximum output power should be clearly distinguished to apply the procedures.

11 Detailed Test Results

11.1 Conducted Power measurements

The maximum conducted average power (Unit: dBm) including tune-up tolerance is shown as below.

11.1.1 Conducted Power of GSM

Mode: GSM850		Maximum Tune-up(dBm)	Burst Average Power (dBm)			Division Factors	Frame-Average Power (dBm)		
			CH128	CH190	CH251		CH128	CH190	CH251
			824.2MHz	836.6MHz	848.8MHz		824.2MHz	836.6MHz	848.8MHz
GPRS (GMSK)	1Tx slot	22.50	22.01	21.01	21.32	-9.03	20.65	19.65	19.96
	2Tx slots	21.50	21.13	20.54	20.15	-9.03	19.77	19.18	18.79
	3Tx slots	19.00	18.85	17.52	17.32	-6.02	17.49	16.16	15.96
	4Tx slots	16.50	16.42	15.32	15.19	-4.26	15.06	13.96	13.83
EGPRS (8PSK)	1Tx slot	29.00	28.37	28.34	28.75	-3.01	27.01	26.98	27.39
	2Tx slots	27.00	26.43	26.28	26.64	-9.03	25.07	24.92	25.28
	3Tx slots	25.00	24.58	24.38	24.73	-6.02	23.22	23.02	23.37
	4Tx slots	23.00	22.52	22.32	22.64	-4.26	21.16	20.96	21.28
Mode: GSM1900		Maximum Tune-up(dBm)	Burst Average Power (dBm)			Division Factors	Frame-Average Power (dBm)		
			CH512	CH661	CH810		CH512	CH661	CH810
			1850.2MHz	1880.0MHz	1909.8MHz		1850.2MHz	1880.0MHz	1909.8MHz
GPRS (GMSK)	1Tx slot	24.50	24.41	24.18	22.68	-9.03	26.69	26.46	24.96
	2Tx slots	23.50	23.13	23.13	21.43	-9.03	25.41	25.41	23.71
	3Tx slots	22.00	21.58	20.75	19.85	-6.02	23.86	23.03	22.13
	4Tx slots	19.50	19.09	19.05	17.47	-4.26	21.37	21.33	19.75
EGPRS (8PSK)	1Tx slot	26.50	26.10	26.18	26.17	-3.01	28.38	28.46	28.45
	2Tx slots	24.50	23.85	24.01	23.96	-9.03	26.13	26.29	26.24
	3Tx slots	22.50	22.37	22.47	22.39	-6.02	24.65	24.75	24.67
	4Tx slots	20.50	20.33	20.38	20.29	-4.26	22.61	22.66	22.57

Note:

Division Factors

To average the power, the division factor is as follows:

1Tx-slots = 1 transmit time slots out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2Tx-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3Tx-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4Tx-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

11.1.2 Conducted Power of WCDMA

Mode		Maximum Tune-up(dBm)	WCDMA Band 2		
			Conducted Power (dBm)		
			CH9262	CH9400	CH9538
			1852.4	1880.0	1907.6
RMC 12.2K		19.00	18.85	18.73	18.19
HSDPA	Subtest-1	20.00	19.92	18.14	16.68
	Subtest-2	19.00	15.93	18.95	17.41
	Subtest-3	18.50	15.93	14.85	18.38
	Subtest-4	17.00	16.85	15.00	14.25
HSUPA	Subtest-1	16.50	16.02	15.37	15.03
	Subtest-2	16.50	16.38	15.76	15.31
	Subtest-3	17.00	16.54	15.91	15.46
	Subtest-4	17.00	16.81	16.20	15.75
	Subtest-5	19.00	18.91	18.12	17.75
Mode		Maximum Tune-up(dBm)	WCDMA Band 4		
			Conducted Power (dBm)		
			CH1312	CH1413	CH1513
			1712.4	1732.6	1752.6
RMC 12.2K		19.50	18.78	19.17	18.42
HSDPA	Subtest-1	20.00	19.81	18.04	17.34
	Subtest-2	19.50	16.78	19.23	17.94
	Subtest-3	20.00	16.87	16.62	19.66
	Subtest-4	18.50	18.47	17.33	17.39
HSUPA	Subtest-1	19.00	18.81	18.61	18.96
	Subtest-2	19.00	18.76	18.58	18.79
	Subtest-3	19.50	18.81	18.66	19.03
	Subtest-4	19.50	19.06	18.94	19.18
	Subtest-5	20.00	19.59	19.39	19.74
Mode		Maximum Tune-up(dBm)	WCDMA Band 5		
			Conducted Power (dBm)		
			CH4132	CH4183	CH4233
			826.4	836.6	846.6
RMC 12.2K		18.00	17.63	17.46	17.63
HSDPA	Subtest-1	19.50	19.38	17.13	16.05
	Subtest-2	18.50	14.68	18.12	16.09
	Subtest-3	18.50	14.71	14.30	18.01
	Subtest-4	16.00	15.92	14.30	13.83
HSUPA	Subtest-1	16.50	16.42	15.45	15.20
	Subtest-2	17.00	16.51	15.42	15.19
	Subtest-3	16.50	16.50	15.51	15.35
	Subtest-4	16.50	16.39	15.43	15.18
	Subtest-5	19.50	19.39	18.58	18.43

Per KDB 941225 D01, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤1/2dB higher than the primary mode (RMC12.2kbps) or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.

11.1.3 Conducted Power of LTE Band 2

LTE-FDD Band 2				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		18607	18900	19193
					1850.7MHz	1880.0MHz	1909.3MHz
1.4MHz	QPSK	1	0	21.00	20.67	20.12	19.95
			2	21.00	20.69	20.12	19.95
			5	21.00	20.67	20.03	19.98
		3	0	20.50	20.31	20.16	19.94
			2	20.50	20.37	20.19	20.02
			3	20.50	20.32	20.11	19.91
		6	0	19.50	19.36	19.11	19.02
	16QAM	1	0	20.50	20.45	19.25	19.40
			2	20.50	20.50	19.23	19.46
			5	20.50	20.45	19.20	19.39
		3	0	20.00	19.65	19.23	19.48
			2	20.00	19.65	19.28	19.52
			3	20.00	19.68	19.22	19.44
		6	0	19.00	18.52	18.20	18.21
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	18615	18900	19185
					1851.5MHz	1880.0MHz	1908.5MHz
3MHz	QPSK	1	0	20.50	20.37	20.13	20.01
			7	20.50	20.31	20.07	19.94
			14	20.50	20.31	20.08	19.95
		8	0	19.50	19.34	19.01	19.03
			4	19.50	19.40	19.05	18.94
			7	19.50	19.41	19.02	18.90
		15	0	19.50	19.38	19.04	19.02
	16QAM	1	0	20.50	20.47	19.25	19.48
			7	20.50	20.47	19.21	19.42
			14	20.50	20.41	19.21	19.41
		8	0	18.50	18.34	18.25	18.05
			4	18.50	18.29	18.24	18.06
			7	18.50	18.30	18.24	18.02
		15	0	19.00	18.53	18.22	18.13
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	18625	18900	19175
					1852.5MHz	1880.0MHz	1907.5MHz
5MHz	QPSK	1	0	20.50	20.24	20.21	20.03
			13	20.50	20.22	20.09	19.95
			24	20.50	20.22	20.08	19.86
		12	0	19.50	19.36	19.15	19.00
			6	19.50	19.35	19.06	19.08
			13	19.50	19.38	18.97	18.93
		25	0	19.50	19.41	19.05	19.01
	16QAM	1	0	20.00	19.81	18.98	19.07
			13	20.00	19.77	18.83	19.07
			24	20.00	19.78	18.78	19.00
		12	0	18.50	18.37	18.10	18.18
			6	18.50	18.24	18.00	18.08
			13	18.50	18.28	18.03	18.05
		25	0	18.50	18.45	18.21	18.18

LTE-FDD Band 2				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		18650	18900	19150
					1855.0MHz	1880.0MHz	1905.0MHz
10MHz	QPSK	1	0	20.50	20.42	20.11	20.22
			25	20.50	20.32	19.97	20.10
			49	20.50	20.34	19.86	20.01
		25	0	19.50	19.35	19.16	19.10
			13	19.50	19.35	19.05	19.03
			25	19.50	19.32	18.93	19.13
		50	0	19.50	19.35	19.14	19.13
	16QAM	1	0	21.00	20.56	19.31	19.35
			25	21.00	20.51	19.15	19.26
			49	21.00	20.51	19.14	19.17
		25	0	18.50	18.36	18.26	18.18
			13	18.50	18.41	18.17	18.15
			25	18.50	18.42	18.13	18.15
		50	0	18.50	18.43	18.27	18.20
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	18675	18900	19125
					1857.5MHz	1880.0MHz	1902.5MHz
15MHz	QPSK	1	0	20.50	20.39	20.18	20.28
			38	20.50	20.31	19.96	20.20
			74	20.50	20.35	19.77	20.01
		36	0	19.50	19.41	19.15	19.17
			18	19.50	19.42	19.03	19.11
			39	19.50	19.46	18.95	19.10
		75	0	19.50	19.41	19.08	19.17
	16QAM	1	0	21.00	20.62	19.38	19.92
			38	20.50	20.46	19.15	19.82
			74	21.00	20.54	19.01	19.70
		36	0	19.00	18.54	18.41	18.30
			18	18.50	18.44	18.20	18.28
			39	18.50	18.49	18.23	18.19
		75	0	19.00	18.53	18.30	18.33
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	18700	18900	19100
					1860.0MHz	1880.0MHz	1900.0MHz
20MHz	QPSK	1	0	21.00	20.57	20.49	20.67
			50	20.50	20.50	20.16	20.32
			99	21.00	20.53	20.04	20.14
		50	0	19.50	19.36	19.26	19.14
			25	19.50	19.41	19.11	19.15
			50	19.50	19.50	19.08	19.02
		100	0	19.50	19.38	19.15	19.22
	16QAM	1	0	20.00	19.18	19.28	19.91
			50	19.50	19.22	18.89	19.09
			99	19.50	19.18	18.80	18.94
		50	0	19.00	18.61	18.43	18.21
			25	19.00	18.60	18.22	18.23
			50	19.00	18.59	18.08	18.15
		100	0	18.50	18.49	18.29	18.26

11.1.4 Conducted Power of LTE Band 4

LTE-FDD Band 4				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		19957	20175	20393
					1710.7MHz	1732.5MHz	1754.3MHz
1.4MHz	QPSK	1	0	20.50	20.13	20.14	20.27
			2	20.50	20.11	20.16	20.29
			5	20.50	20.10	20.12	20.25
		3	0	20.50	20.02	20.21	20.11
			2	20.50	20.02	20.29	19.99
			3	20.50	20.03	20.28	20.12
		6	0	19.50	18.96	19.16	19.13
	16QAM	1	0	20.50	20.02	19.81	19.52
			2	20.00	19.92	19.85	19.51
			5	20.00	19.88	19.81	19.60
		3	0	19.50	19.24	19.37	19.44
			2	19.50	19.19	19.36	19.47
			3	19.50	19.18	19.34	19.38
		6	0	18.50	18.11	18.21	18.27
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	19965	20175	20385
					1711.5MHz	1732.5MHz	1753.5MHz
3MHz	QPSK	1	0	20.50	19.86	20.09	20.28
			7	20.50	19.92	20.15	20.25
			14	20.50	19.77	20.16	20.28
		8	0	19.50	18.97	19.18	19.07
			4	19.50	18.88	19.11	19.02
			7	19.50	18.93	19.20	19.07
		15	0	19.50	18.96	19.19	19.10
	16QAM	1	0	20.50	20.09	19.79	19.47
			7	20.00	19.94	19.79	19.45
			14	20.00	19.98	19.79	19.52
		8	0	18.50	17.90	18.43	18.12
			4	18.50	17.84	18.45	18.12
			7	19.00	17.87	18.53	18.20
		15	0	18.50	18.10	18.27	18.15
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	19975	20175	20375
					1712.5MHz	1732.5MHz	1752.5MHz
5MHz	QPSK	1	0	20.50	19.85	20.21	19.84
			13	20.50	19.71	20.26	19.79
			24	20.50	19.71	20.30	19.83
		12	0	19.50	18.88	19.14	19.06
			6	19.50	18.89	19.10	18.99
			13	19.50	18.83	19.16	19.10
		25	0	19.50	18.88	19.21	19.03
	16QAM	1	0	19.50	19.32	18.89	19.30
			13	19.50	19.26	18.97	19.29
			24	19.50	19.21	18.97	19.30
		12	0	18.50	17.95	18.11	18.16
			6	18.50	17.86	18.10	18.09
			13	18.50	17.86	18.10	18.16
		25	0	18.50	17.96	18.31	18.14

LTE-FDD Band 4				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		20000	20175	20350
					1715.0MHz	1732.5MHz	1750.0MHz
10MHz	QPSK	1	0	20.50	19.91	20.13	20.42
			25	20.50	19.80	20.23	20.19
			49	20.50	19.77	20.24	20.21
		25	0	19.50	18.90	19.15	19.07
			13	19.50	18.89	19.22	19.10
			25	19.50	18.85	19.29	19.05
		50	0	19.50	18.88	19.24	19.10
	16QAM	1	0	20.50	20.06	19.17	19.41
			25	20.00	19.97	19.29	19.26
			49	20.00	19.96	19.33	19.24
		25	0	18.50	17.92	18.30	18.24
			13	18.50	17.85	18.30	18.13
			25	18.50	17.87	18.32	18.19
		50	0	18.50	17.95	18.31	18.21
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	20025	20175	20325
					1717.5MHz	1732.5MHz	1747.5MHz
15MHz	QPSK	1	0	21.00	20.00	20.03	20.84
			38	20.50	19.77	20.21	20.25
			74	20.50	19.85	20.16	20.23
		36	0	19.50	18.90	19.08	19.38
			18	19.50	18.85	19.18	19.16
			39	19.50	18.92	19.29	19.04
		75	0	19.50	18.82	19.15	19.22
	16QAM	1	0	20.50	20.09	19.10	19.96
			38	20.00	19.89	19.32	19.82
			74	20.50	20.06	19.29	19.73
		36	0	18.50	17.96	18.32	18.35
			18	18.50	17.92	18.40	18.20
			39	18.50	17.89	18.43	18.10
		75	0	18.50	18.01	18.21	18.29
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	20050	20175	20300
					1720.0MHz	1732.5MHz	1745.0MHz
20MHz	QPSK	1	0	21.50	20.01	19.96	21.21
			50	20.50	19.85	20.24	20.30
			99	20.50	20.14	20.24	20.21
		50	0	20.00	18.96	19.05	19.74
			25	19.50	18.82	19.20	19.14
			50	19.50	18.87	19.25	19.05
		100	0	19.50	18.88	19.11	19.20
	16QAM	1	0	20.50	18.74	19.15	20.45
			50	19.50	18.50	19.43	19.28
			99	19.50	19.27	19.50	19.06
		50	0	19.00	18.05	18.11	18.91
			25	18.50	18.05	18.31	18.23
			50	18.50	18.13	18.31	18.14
		100	0	18.50	18.05	18.24	18.24

11.1.5 Conducted Power of LTE Band 5

LTE-FDD Band 5				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		20407	20525	20643
					824.7MHz	836.5MHz	848.3MHz
1.4MHz	QPSK	1	0	20.00	19.92	19.34	19.46
			2	20.00	19.97	19.28	19.44
			5	20.00	19.93	19.22	19.45
		3	0	20.00	19.82	19.38	19.34
			2	20.00	19.88	19.39	19.41
			3	20.00	19.86	19.33	19.46
		6	0	19.00	18.94	18.25	18.39
	16QAM	1	0	20.00	19.79	18.79	19.30
			2	20.00	19.75	18.83	19.26
			5	20.00	19.79	18.75	19.37
		3	0	19.50	19.15	18.33	18.82
			2	19.50	19.08	18.29	18.82
			3	19.50	19.08	18.31	18.77
		6	0	18.00	17.98	17.49	17.78
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	20415	20525	20635
					825.5MHz	836.5MHz	847.5MHz
3MHz	QPSK	1	0	20.00	19.84	19.33	19.52
			7	20.00	19.83	19.19	19.53
			14	20.00	19.79	19.11	19.57
		8	0	19.00	18.95	18.35	18.31
			4	19.00	18.95	18.31	18.33
			7	19.50	19.04	18.25	18.44
		15	0	19.00	18.92	18.31	18.36
	16QAM	1	0	20.00	19.76	18.88	19.21
			7	20.00	19.72	18.76	19.21
			14	20.00	19.62	18.67	19.27
		8	0	18.00	17.85	17.48	17.39
			4	18.00	17.92	17.85	17.31
			7	18.00	17.81	17.76	17.73
		15	0	18.50	18.01	17.68	17.31

LTE-FDD Band 5				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		20425	20525	20625
					826.5MHz	836.5MHz	846.5MHz
5MHz	QPSK	1	0	20.00	19.77	19.48	19.22
			13	20.00	19.81	19.28	19.29
			24	20.00	19.77	19.24	19.40
		12	0	19.00	18.93	18.36	18.36
			6	19.50	19.03	18.20	18.32
			13	19.00	18.98	18.09	18.36
		25	0	19.00	18.95	18.31	18.32
	16QAM	1	0	19.50	19.14	18.09	18.27
			13	19.50	19.04	17.92	18.29
			24	19.00	19.00	17.90	18.39
		12	0	18.00	17.94	17.23	17.48
			6	18.00	17.86	17.48	17.29
			13	18.00	17.83	17.42	17.39
		25	0	18.00	17.91	17.65	17.33
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	20450	20525	20600
					829.0MHz	836.5MHz	844.0MHz
10MHz	QPSK	1	0	20.00	19.86	19.62	19.14
			25	20.00	19.72	19.36	19.24
			49	20.00	19.54	19.31	19.43
		25	0	19.00	18.91	18.40	18.29
			13	19.00	18.81	18.18	18.15
			25	19.00	18.67	18.15	18.28
		50	0	19.00	18.82	18.25	18.25
	16QAM	1	0	20.00	19.89	18.59	18.20
			25	20.00	19.70	18.24	18.12
			49	20.00	19.51	18.22	18.40
		25	0	18.00	17.82	17.46	17.26
			13	18.00	18.00	17.65	17.23
			25	18.00	17.79	17.24	17.35
		50	0	18.50	18.06	17.69	17.32

11.1.6 Conducted Power of LTE Band 7

LTE-FDD Band 7				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		20775	21100	21425
					2502.5MHz	2535.0MHz	2567.5MHz
5MHz	QPSK	1	0	20.50	19.96	19.93	20.12
			13	20.50	19.91	19.96	20.28
			24	20.50	19.79	19.90	20.16
		12	0	19.50	18.81	19.01	19.43
			6	20.00	18.94	18.98	19.51
			13	20.00	18.79	19.06	19.54
		25	0	19.50	18.77	19.10	19.50
	16QAM	1	0	20.00	18.99	18.77	19.75
			13	20.00	19.02	18.85	19.72
			24	20.00	18.95	18.73	19.71
		12	0	19.00	17.82	17.97	18.57
			6	19.00	17.80	17.99	18.61
			13	19.00	17.80	18.00	18.53
		25	0	19.00	18.06	18.15	18.56
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	20800	21100	21400
					2505.0MHz	2535.0MHz	2565.0MHz
10MHz	QPSK	1	0	20.00	19.72	19.99	19.96
			25	20.50	19.70	19.97	20.37
			49	21.00	19.73	19.97	20.68
		25	0	19.50	18.98	18.95	19.49
			13	19.50	18.82	19.00	19.43
			25	20.00	18.76	19.02	19.51
		50	0	20.00	18.85	19.02	19.51
	16QAM	1	0	20.50	20.03	19.16	19.57
			25	20.00	19.95	19.15	19.57
			49	20.00	19.97	19.08	19.65
		25	0	19.00	17.79	18.07	18.57
			13	19.00	17.82	18.09	18.58
			25	19.00	17.77	18.11	18.60
		50	0	19.00	17.83	18.18	18.56

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	20825	21100	21375
					2057.5MHz	2535.0MHz	2562.5MHz
15MHz	QPSK	1	0	20.00	19.82	19.99	19.82
			38	20.50	19.75	19.92	20.04
			74	20.50	19.71	19.87	20.34
		36	0	19.50	18.83	19.03	19.25
			18	19.50	18.80	19.01	19.44
			39	19.50	18.74	19.06	19.39
		75	0	19.50	18.68	19.08	19.46
	16QAM	1	0	20.50	20.12	18.97	19.85
			38	20.50	20.04	19.08	20.08
			74	20.50	20.04	19.07	20.28
		36	0	18.50	17.90	18.27	18.49
			18	18.50	17.88	18.15	18.48
			39	19.00	17.84	18.20	18.56
		75	0	18.50	17.89	18.16	18.49
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	21350	21100	21350
					2560.0MHz	2535.0MHz	2560.0MHz
20MHz	QPSK	1	0	20.50	19.76	20.12	19.85
			50	20.00	19.64	19.93	19.82
			99	21.00	19.71	20.29	20.74
		50	0	19.50	18.90	18.98	19.34
			25	19.50	18.73	18.98	19.31
			50	19.50	18.87	19.02	19.42
		100	0	19.50	18.69	19.12	19.39
	16QAM	1	0	19.50	18.70	19.30	19.38
			50	19.50	18.55	19.43	19.37
			99	20.00	18.53	19.47	19.57
		50	0	18.50	18.03	17.99	18.50
			25	19.00	18.01	18.06	18.54
			50	19.00	18.03	18.17	18.65
		100	0	19.00	17.94	18.02	18.53

11.1.7 Conducted Power of LTE Band 12

LTE-FDD Band 12				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		23017	23095	23173
					699.7MHz	707.5MHz	715.5MHz
1.4MHz	QPSK	1	0	19.50	19.21	18.41	18.84
			2	19.50	19.21	18.46	18.81
			5	19.50	19.06	18.43	18.92
		3	0	19.50	19.01	18.53	18.86
			2	19.50	19.01	18.58	18.76
			3	19.00	18.94	18.53	18.85
		6	0	18.50	18.04	17.47	18.22
	16QAM	1	0	19.50	19.06	18.06	18.76
			2	19.50	19.02	18.06	19.08
			5	19.50	18.97	18.12	19.12
		3	0	18.50	18.31	17.56	18.22
			2	18.50	18.34	17.58	18.49
			3	18.50	18.16	17.57	18.50
		6	0	17.50	17.31	16.76	17.28
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	23025	23095	23165
					700.5MHz	707.5MHz	714.5MHz
3MHz	QPSK	1	0	19.50	19.09	18.46	18.82
			7	19.00	18.93	18.52	18.87
			14	19.50	18.79	19.03	18.93
		8	0	18.50	18.10	17.52	17.71
			4	18.50	18.07	17.51	17.77
			7	18.50	18.03	17.70	18.07
		15	0	18.00	18.00	17.54	17.84
	16QAM	1	0	19.50	19.02	18.07	18.70
			7	19.00	18.75	18.11	18.73
			14	19.50	18.69	18.34	19.15
		8	0	17.50	17.09	17.11	16.71
			4	17.50	17.06	17.09	16.66
			7	17.50	16.81	16.98	17.03
		15	0	17.50	17.16	16.87	16.73

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	23035	23095	23155
					701.5MHz	707.5MHz	713.5MHz
5MHz	QPSK	1	0	19.00	18.87	18.46	18.58
			13	19.00	18.75	18.38	18.63
			24	19.50	18.51	19.20	18.76
		12	0	18.50	18.05	17.50	17.64
			6	18.00	17.85	17.47	17.77
			13	18.00	17.78	18.00	17.82
		25	0	18.00	17.90	17.57	17.75
	16QAM	1	0	18.50	18.43	17.22	17.59
			13	18.00	17.98	17.46	17.74
			24	19.00	18.09	18.68	18.18
		12	0	17.50	17.11	16.77	16.91
			6	17.00	16.76	16.78	16.64
			13	17.50	16.62	17.09	16.80
		25	0	17.00	16.85	16.87	16.66
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	22.50	23095	23130
					704.0MHz	707.5MHz	711.0MHz
10MHz	QPSK	1	0	19.00	18.93	18.72	18.75
			25	19.00	18.66	18.47	18.71
			49	19.50	19.11	18.66	19.03
		25	0	18.00	17.90	17.59	17.66
			13	18.50	18.02	17.58	17.86
			25	18.50	17.64	18.31	17.70
		50	0	18.50	18.11	17.62	17.93
	16QAM	1	0	19.50	19.04	17.83	17.54
			25	19.50	19.01	17.53	17.94
			49	19.00	18.71	17.65	18.16
		25	0	17.00	16.71	16.98	16.95
			13	17.00	16.86	16.96	16.92
			25	17.50	16.82	17.42	16.65
		50	0	17.50	17.03	16.98	17.03

11.1.8 Conducted Power of LTE Band 13

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	23205 779.5MHz	23230 782.0MHz	23255 784.5MHz
5MHz	QPSK	1	0	20.50	20.06	20.15	20.25
			13	20.50	20.18	20.24	20.44
			24	21.00	20.22	20.45	20.61
		12	0	19.50	19.02	19.22	19.50
			6	20.00	19.06	19.21	19.52
			13	20.00	19.11	19.57	19.60
		25	0	20.00	19.15	19.25	19.61
	16QAM	1	0	19.50	18.76	19.16	19.41
			13	20.00	18.83	19.16	19.71
			24	20.00	18.93	19.62	19.76
		12	0	18.50	17.90	18.20	18.47
			6	18.50	18.00	18.31	18.49
			13	19.00	18.13	18.42	18.67
		25	0	19.00	18.21	18.28	18.78

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	23230 782.0MHz
10MHz	QPSK	1	0	20.00	19.99
			25	20.50	20.25
			49	21.00	20.74
		25	0	19.50	19.16
			13	19.50	19.28
			25	20.00	19.67
		50	0	19.50	19.40
	16QAM	1	0	20.00	19.99
			25	20.50	20.19
			49	21.00	20.59
		25	0	18.50	18.12
			13	18.50	18.16
			25	18.50	18.49
		50	0	18.50	18.37

11.1.9 Conducted Power of LTE Band 17

LTE-FDD Band 17				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		23755	23790	23825
					706.5MHz	710.0MHz	713.5MHz
5MHz	QPSK	1	0	19.00	18.53	18.31	18.61
			13	19.50	18.39	19.36	18.66
			24	19.00	18.55	18.51	18.79
		12	0	18.00	17.49	17.93	17.58
			6	18.50	17.46	18.38	17.71
			13	18.00	17.46	17.64	17.76
		25	0	18.00	17.56	17.85	17.81
	16QAM	1	0	18.00	17.59	17.71	17.69
			13	19.00	17.16	18.87	17.88
			24	18.50	18.08	17.82	18.31
		12	0	17.50	16.79	17.07	16.88
			6	17.50	16.78	17.50	16.62
			13	17.00	16.79	16.78	16.64
		25	0	17.00	16.93	16.87	16.78
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	23780	23790	23800
					709.0MHz	710.0MHz	711.0MHz
10MHz	QPSK	1	0	19.00	18.59	18.54	18.80
			25	19.50	18.97	19.34	18.82
			49	19.50	18.69	18.81	19.01
		25	0	18.00	17.60	17.58	17.72
			13	18.00	17.83	17.96	17.86
			25	18.00	17.71	17.51	17.69
		50	0	18.00	17.59	17.94	17.91
	16QAM	1	0	19.00	18.96	17.61	17.56
			25	19.00	18.53	18.68	17.95
			49	19.00	18.71	17.85	18.16
		25	0	17.00	16.74	16.92	16.89
			13	17.50	16.92	17.02	16.94
			25	17.00	16.80	16.98	16.69
		50	0	17.00	16.87	16.97	16.99

11.1.10 Conducted Power of LTE Band 25

LTE-FDD Band 25				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		26047	26365	26683
					1850.7MHz	1882.5MHz	1914.3MHz
1.4MHz	QPSK	1	0	22.50	22.41	21.72	21.75
			2	22.50	22.42	21.75	21.70
			5	22.50	22.40	21.75	21.75
		3	0	22.50	22.14	21.79	21.65
			2	22.50	22.18	21.85	21.59
			3	22.50	22.14	21.81	21.55
		6	0	21.50	21.16	20.76	20.67
	16QAM	1	0	22.50	22.23	20.91	21.07
			2	22.50	22.17	20.89	21.13
			5	22.50	22.21	20.90	21.05
		3	0	21.50	21.41	20.88	21.13
			2	21.50	21.40	20.85	21.07
			3	21.50	21.45	20.92	21.05
		6	0	20.50	20.13	19.88	19.92
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	26055	26365	26675
					1851.5MHz	1882.5MHz	1913.5MHz
3MHz	QPSK	1	0	22.50	22.15	21.83	21.70
			7	22.50	22.08	21.75	21.72
			14	22.50	22.11	21.77	21.73
		8	0	21.50	21.13	20.88	20.72
			4	21.50	21.20	20.82	20.54
			7	21.50	21.21	20.66	20.68
		15	0	21.50	21.17	20.82	20.69
	16QAM	1	0	22.50	22.24	20.99	21.14
			7	22.50	22.26	20.90	21.10
			14	22.50	22.20	20.91	21.12
		8	0	20.50	20.15	19.98	19.75
			4	20.50	20.14	20.08	19.75
			7	20.50	20.15	19.98	19.73
		15	0	20.50	20.31	19.78	19.77
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	26065	26365	26665
					1852.5MHz	1882.5MHz	1912.5MHz
5MHz	QPSK	1	0	22.50	22.03	21.91	21.69
			13	22.50	22.02	21.81	21.65
			24	22.50	22.01	21.80	21.58
		12	0	21.50	21.14	20.81	20.75
			6	21.50	21.21	20.67	20.62
			13	21.50	21.11	20.72	20.57
		25	0	21.50	21.13	20.72	20.74
	16QAM	1	0	22.00	21.56	20.62	20.79
			13	22.00	21.60	20.62	20.67
			24	22.00	21.62	20.54	20.68
		12	0	20.50	20.06	19.77	19.74
			6	20.50	20.13	19.74	19.73
			13	20.50	20.18	19.69	19.65
		25	0	20.50	20.34	19.86	19.70

LTE-FDD Band 25				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		26090	26365	26640
					1855 MHz	1882.5MHz	1910MHz
10MHz	QPSK	1	0	22.50	22.12	21.81	21.83
			25	22.50	22.06	21.62	21.75
			49	22.50	22.13	21.60	21.74
		25	0	21.50	21.20	20.74	20.82
			13	21.50	21.15	20.81	20.69
			25	21.50	21.19	20.63	20.68
		50	0	21.50	21.13	20.81	20.68
	16QAM	1	0	22.50	22.20	20.98	21.00
			25	22.50	22.29	20.82	20.87
			49	22.50	22.22	20.77	20.82
		25	0	20.50	20.14	19.89	19.85
			13	20.50	20.13	19.89	19.78
			25	20.50	20.20	19.86	19.79
		50	0	20.50	20.25	20.01	19.79
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	26115	26365	26615
					1857.5MHz	1882.5MHz	1907.5MHz
15MHz	QPSK	1	0	22.50	22.13	21.86	21.89
			38	22.50	22.08	21.62	21.77
			74	22.50	22.11	21.63	21.68
		36	0	21.50	21.12	20.87	20.80
			18	21.50	21.21	20.71	20.83
			39	21.50	21.18	20.68	20.77
		75	0	21.50	21.19	20.70	20.84
	16QAM	1	0	22.50	22.25	21.09	21.59
			38	22.50	22.22	20.80	21.38
			74	22.50	22.23	20.78	21.32
		36	0	20.50	20.29	20.06	19.93
			18	20.50	20.25	20.03	19.80
			39	20.50	20.24	19.88	19.70
		75	0	20.50	20.31	19.92	19.92
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	26140	26365	26590
					1860 MHz	1882.5MHz	1905MHz
20MHz	QPSK	1	0	22.50	22.27	22.26	22.02
			50	22.50	22.23	21.96	21.92
			99	22.50	22.22	21.92	21.75
		50	0	21.50	21.10	20.98	20.96
			25	21.50	21.23	20.73	20.82
			50	21.50	21.16	20.72	20.74
		100	0	21.50	21.20	20.88	20.88
	16QAM	1	0	21.50	21.03	20.84	20.79
			50	21.50	21.02	20.50	20.75
			99	21.00	20.97	20.48	20.60
		50	0	20.50	20.27	20.10	19.98
			25	20.50	20.33	19.92	19.93
			50	20.50	20.34	19.84	19.75
		100	0	20.50	20.29	19.94	19.89

11.1.11Conducted Power of LTE Band 26(814-824)

LTE-FDD Band 26				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		26697	26740	26783
					814.7 MHz	819.0MHz	823.3 MHz
1.4MHz	QPSK	1	0	22.50	21.93	21.94	22.25
			2	22.50	21.97	22.02	22.23
			5	22.50	22.00	22.08	22.20
		3	0	22.50	21.67	22.13	22.06
			2	22.50	21.72	21.91	22.14
			3	22.50	21.68	22.06	22.14
		6	0	21.50	20.81	20.93	21.16
	16QAM	1	0	22.00	21.58	21.44	21.83
			2	22.00	21.63	21.35	21.85
			5	22.00	21.64	21.43	21.75
		3	0	21.50	20.90	21.11	21.43
			2	21.50	20.89	21.14	21.43
			3	21.50	20.93	21.16	21.41
		6	0	20.50	20.01	20.15	20.42
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	26705	26740	26775
					815.5 MHz	819.0MHz	822.5 MHz
3MHz	QPSK	1	0	22.50	21.70	21.97	22.26
			7	22.50	21.81	21.96	22.31
			14	22.50	21.84	22.03	22.34
		8	0	21.50	20.74	20.90	21.06
			4	21.50	20.73	20.88	21.13
			7	21.50	20.88	21.02	21.11
		15	0	21.50	20.80	21.08	21.06
	16QAM	1	0	22.00	21.64	21.33	21.79
			7	22.00	21.65	21.44	21.78
			14	22.00	21.80	21.46	21.77
		8	0	20.50	19.91	20.39	20.29
			4	20.50	19.91	20.42	20.33
			7	20.50	19.94	20.45	20.26
		15	0	20.50	20.08	20.27	20.42

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	26715	26740	26765
					816.5 MHz	819.0MHz	821.5 MHz
5MHz	QPSK	1	0	22.50	21.80	21.91	22.04
			13	22.00	21.82	21.91	21.98
			24	22.50	21.93	22.04	22.02
		12	0	21.00	20.87	20.98	20.97
			6	21.50	20.82	20.95	21.07
			13	21.50	20.85	21.00	21.04
		25	0	21.50	20.85	21.02	21.03
	16QAM	1	0	21.00	20.98	20.59	21.00
			13	21.50	21.18	20.62	21.06
			24	21.50	21.28	20.84	21.10
		12	0	20.50	19.92	20.00	20.25
			6	20.50	19.91	20.15	20.29
			13	20.50	19.97	20.09	20.28
		25	0	20.50	20.17	20.24	20.24

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	26740
					819.0MHz
10MHz	QPSK	1	0	22.00	21.65
			25	22.00	21.84
			49	22.50	22.07
		25	0	21.00	20.92
			13	21.50	21.02
			25	21.50	21.03
		50	0	21.00	20.96
	16QAM	1	0	22.00	21.66
			25	22.00	21.98
			49	22.50	22.06
		25	0	20.50	20.02
			13	20.50	20.09
			25	20.50	20.12
		50	0	20.50	20.20

11.1.12Conducted Power of LTE Band 26(824-849)

LTE-FDD Band 26				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		26797	26915	27033
					824.7 MHz	836.5 MHz	848.3 MHz
1.4MHz	QPSK	1	0	22.50	22.23	21.23	21.24
			2	22.50	22.24	21.29	21.38
			5	22.50	22.16	21.27	21.36
		3	0	22.50	22.05	21.43	21.23
			2	22.50	22.11	21.44	21.29
			3	22.50	22.10	21.31	21.32
		6	0	21.50	21.14	20.39	20.27
	16QAM	1	0	22.50	22.01	20.94	21.17
			2	22.50	22.01	20.94	21.24
			5	22.50	22.01	20.88	21.24
		3	0	21.50	21.37	20.46	20.72
			2	21.50	21.35	20.39	20.76
			3	21.50	21.31	20.41	20.72
		6	0	20.50	20.32	19.49	19.62
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	26805	26915	27025
					825.5 MHz	836.5 MHz	847.5 MHz
3MHz	QPSK	1	0	22.50	22.03	21.39	21.27
			7	22.00	21.93	21.26	21.39
			14	22.00	21.98	21.24	21.44
		8	0	21.50	21.13	20.51	20.14
			4	21.50	21.20	20.33	20.22
			7	21.50	21.09	20.26	20.15
		15	0	21.50	21.04	20.33	20.26
	16QAM	1	0	22.00	21.85	20.98	21.10
			7	22.00	21.84	20.90	21.06
			14	22.00	21.87	20.82	21.15
		8	0	20.50	20.24	19.80	19.34
			4	20.50	20.21	19.78	19.40
			7	20.50	20.12	19.72	19.41
		15	0	20.50	20.34	19.62	19.39

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	26815	26915	27015
					826.5 MHz	836.5 MHz	846.5 MHz
5MHz	QPSK	1	0	22.50	22.03	21.46	21.23
			13	22.00	21.88	21.31	21.14
			24	22.00	21.80	21.25	21.28
		12	0	21.50	21.10	20.52	20.15
			6	21.50	21.06	20.27	20.05
			13	21.00	20.93	20.32	20.13
		25	0	21.50	21.09	20.44	20.18
	16QAM	1	0	22.00	21.63	20.63	19.91
			13	22.00	21.56	20.43	19.85
			24	21.50	21.38	20.36	20.00
		12	0	20.50	20.37	19.59	19.22
			6	20.50	20.32	19.57	19.27
			13	20.50	20.22	19.42	19.30
		25	0	20.50	20.42	19.76	19.45
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	26840	26915	26990
					829 MHz	836.5 MHz	844 MHz
10MHz	QPSK	1	0	22.50	22.02	21.68	21.27
			25	22.00	21.80	21.40	21.21
			49	22.00	21.54	21.21	21.26
		25	0	21.50	21.07	20.55	20.16
			13	21.00	20.98	20.26	20.11
			25	21.00	20.77	20.15	20.24
		50	0	21.00	20.87	20.29	20.15
	16QAM	1	0	22.50	22.04	20.70	20.19
			25	22.00	21.78	20.41	20.06
			49	22.00	21.61	20.25	20.26
		25	0	20.50	20.17	19.81	19.39
			13	20.50	20.05	19.60	19.40
			25	20.00	19.96	19.47	19.46
		50	0	20.50	20.07	19.70	19.38
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	26865	26915	26965
					831.5 MHz	836.5 MHz	841.5 MHz
15MHz	QPSK	1	0	22.50	22.10	21.85	21.55
			38	22.00	21.71	21.43	21.14
			74	21.50	21.29	21.12	21.24
		36	0	21.00	20.93	20.60	20.31
			18	21.00	20.75	20.31	20.12
			39	20.50	20.50	20.09	20.18
		75	0	21.00	20.81	20.38	20.25
	16QAM	1	0	22.50	22.08	20.91	21.04
			38	22.00	21.66	20.38	20.72
			74	21.50	21.32	20.15	20.79
		36	0	20.50	20.18	19.95	19.53
			18	20.50	20.02	19.72	19.35
			39	20.00	19.76	19.55	19.40
		75	0	20.50	20.05	19.65	19.52

11.1.13Conducted Power of LTE Band 38

LTE-TDD Band 38				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		37775	38000	38225
					2572.5MHz	2595.0MHz	2617.5MHz
5MHz	QPSK	1	0	21.50	21.29	21.19	21.44
			13	21.50	21.26	21.14	21.43
			24	21.50	21.26	21.16	21.40
		12	0	20.50	20.32	20.40	20.45
			6	20.50	20.28	20.36	20.39
			13	20.50	20.31	20.41	20.40
		25	0	20.50	20.35	20.22	20.41
	16QAM	1	0	21.00	20.01	20.72	20.07
			13	21.00	20.05	20.59	20.07
			24	21.00	19.96	20.71	20.06
		12	0	19.50	19.31	19.44	19.44
			6	19.50	19.25	19.39	19.41
			13	19.50	19.29	19.44	19.45
		25	0	20.00	19.53	19.55	19.73
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	37800	38000	38200
					2575.0MHz	2595.0MHz	2615.0MHz
10MHz	QPSK	1	0	22.00	21.45	21.46	21.53
			25	22.00	21.38	21.47	21.54
			49	22.00	21.39	21.50	21.54
		25	0	21.00	20.33	20.27	20.59
			13	21.00	20.27	20.33	20.65
			25	21.00	20.29	20.47	20.65
		50	0	21.00	20.32	20.33	20.54
	16QAM	1	0	21.50	21.11	20.20	21.00
			25	21.50	21.02	20.07	21.15
			49	21.50	21.11	20.14	21.15
		25	0	20.00	19.39	19.61	19.64
			13	20.00	19.25	19.50	19.66
			25	20.00	19.34	19.57	19.69
		50	0	20.00	19.36	19.60	19.74

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	37825	38000	38175
					2577.5MHz	2595.0MHz	2612.5MHz
15MHz	QPSK	1	0	22.00	21.47	21.58	21.46
			38	22.00	21.44	21.61	21.40
			74	22.00	21.49	21.65	21.37
		36	0	21.00	20.33	20.56	20.61
			18	21.00	20.32	20.47	20.52
			39	21.00	20.24	20.55	20.56
		75	0	21.00	20.37	20.54	20.58
	16QAM	1	0	21.50	21.09	19.82	20.51
			38	21.50	21.07	19.75	20.53
			74	21.00	20.96	19.83	20.52
		36	0	20.00	19.33	19.84	19.59
			18	20.00	19.48	19.89	19.49
			39	20.00	19.41	19.81	19.55
		75	0	20.00	19.32	19.71	19.77
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	38750	38000	38150
					2580.0MHz	2595.0MHz	2610.0MHz
20MHz	QPSK	1	0	22.00	21.23	21.43	21.72
			50	22.00	21.25	21.40	21.63
			99	22.00	21.30	21.36	21.67
		50	0	21.00	20.28	20.33	20.53
			25	21.00	20.36	20.36	20.58
			50	21.00	20.37	20.35	20.55
		100	0	20.50	20.32	20.32	20.48
	16QAM	1	0	21.00	20.43	20.08	20.72
			50	21.00	20.44	20.19	20.71
			99	21.00	20.40	19.99	20.78
		50	0	20.00	19.50	19.48	19.76
			25	20.00	19.59	19.43	19.64
			50	20.00	19.71	19.45	19.71
		100	0	20.00	19.43	19.43	19.68

11.1.14Conducted Power of LTE Band 41

LTE-TDD Band 41				Maximum Tune-up(dBm)	Conducted Power(dBm)				
Bandwidth	Modulation	RB allocation	RB offset		40065	40265	40640	41015	41215
					2537.5MHz	2557.5MHz	2595.0MHz	2632.5 MHz	2652.5MHz
5MHz	QPSK	1	0	21.50	21.15	20.65	21.15	20.01	19.86
			13	21.50	21.20	20.67	21.14	20.15	20.16
			24	21.50	21.05	20.64	21.22	19.87	19.51
		12	0	20.50	20.20	19.77	20.33	19.27	19.21
			6	20.50	20.21	19.76	20.31	19.24	19.17
			13	20.50	20.12	19.72	20.31	19.18	19.04
		25	0	20.50	20.07	19.70	20.32	19.22	19.12
	16QAM	1	0	21.00	19.85	19.79	20.72	19.27	18.81
			13	21.00	19.89	19.79	20.68	19.27	18.85
			24	21.00	19.84	19.75	20.66	19.18	18.69
		12	0	19.50	19.19	18.81	19.43	18.28	18.12
			6	19.50	19.19	18.79	19.39	18.24	18.09
			13	19.50	19.11	18.77	19.42	18.29	18.15
		25	0	20.00	19.42	19.02	19.62	18.51	18.39
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	40090	40290	40640	40990	41190
					2540.0MHz	2560.0MHz	2595.0MHz	2630.0MHz	2650.0MHz
10MHz	QPSK	1	0	22.00	21.42	21.00	21.57	20.44	20.31
			25	22.00	21.19	20.89	21.59	20.43	20.26
			49	22.00	21.17	20.89	21.61	20.41	20.20
		25	0	21.00	20.17	19.88	20.58	19.48	19.37
			13	20.50	20.15	19.82	20.49	19.42	19.34
			25	21.00	20.07	19.81	20.54	19.40	19.25
		50	0	20.50	20.04	19.74	20.43	19.34	19.25
	16QAM	1	0	21.00	20.72	19.77	19.82	19.51	20.20
			25	20.50	20.50	19.63	19.75	19.36	19.96
			49	21.00	20.65	19.74	19.82	19.29	19.76
		25	0	20.00	19.26	18.93	19.60	18.57	18.53
			13	20.00	19.20	18.92	19.63	18.49	18.35
			25	20.00	19.10	18.88	19.66	18.53	18.39
		50	0	20.00	19.23	18.98	19.72	18.57	18.41

Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	40115	40315	40640	40965	41165
					2542.5MHz	2562.5MHz	2595.0MHz	2627.5MHz	2647.5MHz
15MHz	QPSK	1	0	22.00	21.39	20.99	21.58	20.52	20.46
			38	22.00	21.16	20.85	21.53	20.39	20.24
			74	22.00	21.06	20.88	21.69	20.33	19.97
		36	0	21.00	20.12	19.83	20.53	19.53	19.52
			18	21.00	20.14	19.87	20.59	19.46	19.33
			39	21.00	20.13	19.90	20.67	19.49	19.30
		75	0	20.50	20.01	19.76	20.50	19.48	19.46
	16QAM	1	0	21.00	20.80	19.77	19.73	19.13	19.52
			38	21.00	20.63	19.73	19.83	19.13	19.42
			74	20.50	20.34	19.54	19.73	18.92	19.11
		36	0	20.00	19.23	18.99	19.74	18.64	18.54
			18	20.00	19.18	19.01	19.84	18.63	18.42
			39	20.00	19.15	19.03	19.91	18.61	18.31
		75	0	20.00	19.20	18.95	19.70	18.65	18.59
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	40140	40340	40640	40940	41140
					2545.0MHz	2565.0MHz	2595.0MHz	2625.0MHz	2645.0MHz
20MHz	QPSK	1	0	21.50	21.18	20.82	21.46	20.53	20.59
			50	21.50	20.97	20.70	21.42	20.38	20.33
			99	21.50	20.96	20.70	21.44	20.33	20.21
		50	0	20.50	20.22	19.82	20.41	19.43	19.45
			25	20.50	20.09	19.78	20.46	19.41	19.36
			50	20.50	20.08	19.75	20.41	19.39	19.36
		100	0	20.50	20.12	19.75	20.38	19.39	19.39
	16QAM	1	0	20.50	19.94	19.53	20.11	19.22	19.32
			50	20.50	19.77	19.46	20.14	18.82	18.49
			99	20.50	19.66	19.44	20.21	18.80	18.38
		50	0	19.50	19.31	18.85	19.38	18.56	18.74
			25	19.50	19.29	18.85	19.41	18.49	18.57
			50	19.50	19.29	18.86	19.43	18.44	18.44
		100	0	20.00	19.11	18.82	19.52	18.51	18.50

11.1.15Conducted Power of LTE Band 66

LTE-FDD Band 66				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		131979	132322	132665
					1710.7MHz	1755.0MHz	1779.3MHz
1.4MHz	QPSK	1	0	22.00	21.77	21.62	21.69
			2	22.00	21.74	21.68	21.71
			5	22.00	21.74	21.69	21.69
		3	0	22.00	21.46	21.34	21.71
			2	22.00	21.47	21.35	21.71
			3	22.00	21.53	21.35	21.74
		6	0	22.00	20.65	20.58	21.70
	16QAM	1	0	22.00	21.56	21.49	21.71
			2	22.00	21.54	21.36	21.73
			5	22.00	21.56	21.41	21.73
		3	0	22.00	20.84	20.95	21.73
			2	22.00	20.82	20.97	21.76
			3	22.00	20.81	20.97	21.72
		6	0	22.00	19.62	19.78	21.71
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	131987	132322	132657
					1711.5MHz	1755.0MHz	1778.5MHz
3MHz	QPSK	1	0	22.00	21.54	21.26	21.63
			7	22.00	21.45	21.20	21.60
			14	22.00	21.37	21.22	21.57
		8	0	21.00	20.59	20.43	20.53
			4	21.00	20.49	20.49	20.65
			7	21.00	20.47	20.49	20.51
		15	0	21.00	20.45	20.47	20.63
	16QAM	1	0	22.00	21.66	21.25	21.16
			7	22.00	21.51	21.18	21.10
			14	21.50	21.44	21.13	21.02
		8	0	20.00	19.51	19.80	19.72
			4	20.00	19.46	19.73	19.70
			7	20.00	19.47	19.72	19.66
		15	0	20.00	19.66	19.68	19.68
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	131997	132322	132647
					1712.5MHz	1755.0MHz	1775.0MHz
5MHz	QPSK	1	0	22.00	21.40	21.59	21.61
			13	22.00	21.33	21.52	21.51
			24	21.50	21.25	21.49	21.50
		12	0	21.00	20.52	20.54	20.61
			6	21.00	20.39	20.50	20.66
			13	21.00	20.34	20.45	20.62
		25	0	21.00	20.46	20.51	20.64
	16QAM	1	0	21.00	20.98	20.36	20.75
			13	21.00	20.88	20.23	20.67
			24	21.00	20.76	20.24	20.57
		12	0	20.00	19.47	19.49	19.76
			6	20.00	19.46	19.44	19.74
			13	20.00	19.44	19.40	19.69
		25	0	20.00	19.57	19.62	19.70

LTE-FDD Band 66				Maximum Tune-up(dBm)	Conducted Power(dBm)		
Bandwidth	Modulation	RB allocation	RB offset		132022	132322	132622
					1715.0MHz	1755.0MHz	1775.0MHz
10MHz	QPSK	1	0	22.00	21.48	21.52	21.79
			25	22.00	21.34	21.37	21.70
			49	22.00	21.30	21.31	21.58
		25	0	21.00	20.44	20.47	20.79
			13	21.00	20.35	20.40	20.77
			25	21.00	20.29	20.46	20.67
		50	0	21.00	20.39	20.42	20.63
	16QAM	1	0	22.00	21.68	20.67	20.99
			25	22.00	21.55	20.56	20.87
			49	21.50	21.39	20.48	20.76
		25	0	20.00	19.50	19.62	19.81
			13	20.00	19.38	19.57	19.75
			25	20.00	19.26	19.54	19.71
		50	0	20.00	19.52	19.64	19.75
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	132047	132322	132597
					1717.5MHz	1755.0MHz	1772.5MHz
15MHz	QPSK	1	0	22.00	21.55	21.61	21.77
			38	22.00	21.23	21.40	21.80
			74	22.00	21.26	21.27	21.61
		36	0	21.00	20.44	20.53	20.79
			18	21.00	20.29	20.52	20.65
			39	21.00	20.25	20.33	20.61
		75	0	21.00	20.41	20.45	20.69
	16QAM	1	0	22.00	21.73	20.73	21.42
			38	21.50	21.41	20.53	21.35
			74	21.50	21.45	20.44	21.31
		36	0	20.00	19.53	19.76	19.91
			18	20.00	19.42	19.70	19.82
			39	20.00	19.41	19.55	19.77
		75	0	20.00	19.50	19.65	19.87
Bandwidth	Modulation	RB allocation	RB offset	Maximum Tune-up(dBm)	132072	132322	132572
					1720.0MHz	1755.0MHz	1770.0MHz
20MHz	QPSK	1	0	22.00	21.62	21.91	21.67
			50	22.00	21.37	21.47	21.80
			99	22.00	21.49	21.40	21.65
		50	0	21.00	20.47	20.62	20.68
			25	21.00	20.28	20.41	20.72
			50	21.00	20.26	20.46	20.71
		100	0	21.00	20.45	20.60	20.70
	16 QAM	1	0	21.50	20.33	21.30	20.56
			50	21.50	20.04	21.17	20.66
			99	21.50	20.09	21.07	20.58
		50	0	20.00	19.56	19.70	19.78
			25	20.00	19.46	19.61	19.80
			50	20.00	19.48	19.54	19.76
		100	0	20.00	19.43	19.53	19.78

11.1.16Conducted Power of Wi-Fi 2.4G

ANT1

Mode	802.11b		
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)
Average Power(dBm)	19.60	18.25	16.03
Mode	802.11g		
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)
Average Power(dBM)	20.01	20.22	17.61
Mode	802.11n(HT20)		
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)
Average Power(dBM)	16.48	15.69	13.63
Mode	802.11n(HT40)		
Channel/Frequency(MHz)	1(2422)	6(2437)	11(2452)
Average Power(dBm)	14.01	20.15	20.91
Mode	802.11ax20		
Channel/Frequency(MHz)	1(2412)	6(2437)	11(2462)
Average Power(dBm)	20.97	20.10	17.98
Mode	802.11ax40		
Channel/Frequency(MHz)	1(2422)	6(2437)	11(2452)
Average Power(dBm)	18.39	18.27	19.19

11.1.17Tune-up power tolerance

Band	Tune-up power tolerance(dBm)		
GSM850	GSM/GPRS (GMSK)	GSM	Max output power =22.50 ±1.0dBm
		1TXslots	Max output power =21.50 ±1.0dBm
		2TXslots	Max output power =19.00 ±1.0dBm
		3TXslots	Max output power =16.50 ±1.0dBm
		4TXslots	Max output power =29.00 ±1.0dBm
	EGPRS (8-PSK)	1TXslots	Max output power =27.00 ±1.0dBm
		2TXslots	Max output power =25.00 ±1.0dBm
		3TXslots	Max output power =23.00 ±1.0dBm
		4TXslots	Max output power =22.50 ±1.0dBm
GSM1900	GSM/GPRS (GMSK)	GSM	Max output power =24.50 ±1.0dBm
		1TXslots	Max output power =23.50 ±1.0dBm
		2TXslots	Max output power =22.00 ±1.0dBm
		3TXslots	Max output power =19.50 ±1.0dBm
		4TXslots	Max output power =26.50 ±1.0dBm
	EGPRS (8-PSK)	1TXslots	Max output power =24.50 ±1.0dBm
		2TXslots	Max output power =22.50 ±1.0dBm
		3TXslots	Max output power =20.50 ±1.0dBm
		4TXslots	Max output power =24.50 ±1.0dBm
WCDMA 2	Max output power =20.00±1.0dBm		
WCDMA 4	Max output power =20.00±1.0dBm		
WCDMA 5	Max output power =19.50±1.0dBm		
LTE B2	Max output power =21.00±1.0dBm		
LTE B4	Max output power =21.50±1.0dBm		
LTE B5	Max output power =20.00±1.0dBm		
LTE B7	Max output power =21.00±1.0dBm		
LTE B12	Max output power =19.50±1.0dBm		
LTE B13	Max output power =21.00±1.0dBm		
LTE B17	Max output power =19.50±1.0dBm		
LTE B25	Max output power =22.50±1.0dBm		
LTE B26	Max output power =22.50±1.0dBm		
LTE B26	Max output power =22.50±1.0dBm		
LTE B38	Max output power =22.00±1.0dBm		
LTE B41	Max output power =22.00±1.0dBm		
LTE B66	Max output power =22.00±1.0dBm		
2.4G WIFI	802.11b		Max output power =20.00±1.0dBm
	802.11g		Max output power =20.50±1.0dBm
	802.11n (HT20)		Max output power =17.00±1.0dBm
	802.11n (HT40)		Max output power =21.00±1.0dBm
	802.11ax20		Max output power =21.00±1.0dBm
	802.11ax40		Max output power =19.50±1.0dBm

11.2 SAR test results

Notes:

1) Per KDB447498 ,the SAR test shall be performed at the high, middle and low frequency channels of each operating mode. If the scaled SAR measured at mid-band channel for each test configuration is at least 3.0 dB lower than the SAR limit (< 0.8 W/kg), testing at the high and low channels is optional.

2) Per KDB447498 , testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is: ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz. When the maximum output power variation across the required test channels is > ½ dB, instead of the middle channel, the highest output power channel must be used.

3) Per KDB447498 , All measurement SAR result is scaled-up to account for tune-up tolerance is compliant.

4) Per KDB648474 D04v01r02, body-worn accessory testing is typically associated with voice operations. Therefore, GSM voice was evaluated for body-worn with headset SAR.

5)Per KDB248227 D01v01r02, the procedures required to establish specific device operating configurations for testing the SAR of 802.11 a/b/g transmitters.

(1) For Headsets operating next to ear, hotspot mode or mini-tablet configurations, the initial test position procedures were applied. The test position with the highest extrapolated peak SAR will be used as the initial test position. When the reported SAR of initial test position is <= 0.4 W/kg, SAR testing for remaining test positions is not required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR result is <= 0.8 W/kg or all test positions are measured.

(2) For WLAN 2.4 GHz, the highest measured maximum output power channel for DSSS was selected for SAR measurement. When the reported SAR is <= 0.8 W/kg, no further SAR testing is required. Otherwise, SAR is evaluated at the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel. For OFDM modes (802.11g/n), SAR is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and it is <= 1.2 W/kg.

(3) For WLAN 5 GHz, the initial test configuration was selected according to the transmission mode with the highest maximum output power. When the reported SAR of initial test configuration is > 0.8 W/kg, SAR is required for the subsequent highest measured output power channel until the reported SAR result is <= 1.2 W/kg or all required channels are measured. For other transmission modes, SAR is not required when the highest reported SAR for initial test configuration is adjusted by the ratio of subsequent test configuration to initial test configuration specified maximum output power and it is <= 1.2 W/kg.

6) Per KDB865664 D01v01r04,for each frequency band,repeated SAR measurement is required only when the measured SAR is ≥0.8W/Kg; if the deviation among the repeated measurement is ≤20%,and the measured SAR <1.45W/Kg,only one repeated measurement is required.

7) Per KDB865664 D02v01r01, SAR plot is only required for the highest measured SAR in each exposure configuration, wireless mode and frequency band combination; Plots are also required when the measured SAR is > 1.5 W/kg, or > 7.0 W/kg for occupational exposure. The published RF exposure KDB procedures may require additional plots; for example, to support SAR to peak location separation ratio test exclusion and/or volume scan post-processing(Refer to appendix B for details).

8) Per KDB941225 D06v01r01, the DUT Dimension is bigger than 9 cm x 5 cm, so 10mm is chosen as the test separation distance for Hotspot mode. When the antenna-to-edge distance is greater than 2.5cm,such position does not need to be tested.

9) Per KDB 941225 D01, 3G SAR Measurement Procedures ,The mode tested for SAR is referred to as the primary mode. The equivalent modes considered for SAR test reduction are denoted as secondary modes. Both primary and secondary modes must be in the same frequency band. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is≤ 1/4 dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤1.2 W/kg, SAR measurement is not required for the secondary mode.

10)Per KDB 941225 D05, SAR Evaluation Considerations for LTE Devices

(1)QPSK with 1 RB and 50% RB allocation

Start with the largest channel bandwidth and measure SAR, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.

(2)QPSK with 100% RB allocation

SAR is not required when the highest maximum output power for 100% RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.

(3)Higher order modulations

SAR is required only when the highest maximum output power for the configuration in the higher order modulation is > 1/2 dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is >1.45 W/kg.

(4)Other channel bandwidth

SAR is required when the highest maximum output power of the smaller channel bandwidth is > 1/2 dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.

11.3 Test Result

11.3.1 Results overview of GSM

Mode	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
GPRS 850+4slots	Front	251	848.8	0.100	0.036	100	1.00	28.75	29.00	1.059	0.038
	Back	251	848.8	-0.190	0.048	100	1.00	28.75	29.00	1.059	0.051
	Left	251	848.8	0.150	0.002	100	1.00	28.75	29.00	1.059	0.002
	right	251	848.8	-0.110	0.029	100	1.00	28.75	29.00	1.059	0.031
	Top	251	848.8	-0.160	0.030	100	1.00	28.75	29.00	1.059	0.032
	Bottom	251	848.8	0.050	0.002	100	1.00	28.75	29.00	1.059	0.002

Mode	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
GPRS 1900+4slots	Front	661	1880	0.020	0.137	100	1.00	26.18	26.50	1.076	0.147
	Back	661	1880	-0.030	0.149	100	1.00	26.18	26.50	1.076	0.160
	Left	661	1880	0.170	0.004	100	1.00	26.18	26.50	1.076	0.004
	right	661	1880	-0.080	0.128	100	1.00	26.18	26.50	1.076	0.138
	Top	661	1880	0.180	0.101	100	1.00	26.18	26.50	1.076	0.109
	Bottom	661	1880	0.030	0.003	100	1.00	26.18	26.50	1.076	0.003

11.3.2 Results overview of WCDMA

Mode	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
WCDMA Band 2 (RMC*)	Front	9262	1852.4	-0.010	0.628	100	1.00	19.92	20.00	1.019	0.640
	Back	9262	1852.4	-0.190	0.704	100	1.00	19.92	20.00	1.019	0.717
	Left	9262	1852.4	0.020	0.053	100	1.00	19.92	20.00	1.019	0.054
	right	9262	1852.4	0.150	0.572	100	1.00	19.92	20.00	1.019	0.583
	Top	9262	1852.4	0.130	0.349	100	1.00	19.92	20.00	1.019	0.355
	Bottom	9262	1852.4	-0.110	0.018	100	1.00	19.92	20.00	1.019	0.018

Mode	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
WCDMA Band 4 (RMC*)	Front	1312	1712.4	-0.020	0.089	100	1.00	19.81	20.00	1.045	0.093
	Back	1312	1712.4	-0.190	0.115	100	1.00	19.81	20.00	1.045	0.120
	Left	1312	1712.4	-0.130	0.006	100	1.00	19.81	20.00	1.045	0.006
	right	1312	1712.4	-0.180	0.071	100	1.00	19.81	20.00	1.045	0.074
	Top	1312	1712.4	-0.150	0.076	100	1.00	19.81	20.00	1.045	0.079
	Bottom	1312	1712.4	-0.050	0.048	100	1.00	19.81	20.00	1.045	0.050

Mode	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
WCDMA Band 5 (RMC*)	Front	4132	826.4	0.040	0.031	100	1.00	19.39	19.50	1.026	0.032
	Back	4132	826.4	-0.190	0.041	100	1.00	19.39	19.50	1.026	0.042
	Left	4132	826.4	0.060	0.002	100	1.00	19.39	19.50	1.026	0.002
	right	4132	826.4	-0.170	0.020	100	1.00	19.39	19.50	1.026	0.021
	Top	4132	826.4	-0.140	0.025	100	1.00	19.39	19.50	1.026	0.026
	Bottom	4132	826.4	-0.090	0.002	100	1.00	19.39	19.50	1.026	0.002

11.3.3 Results overview of LTE

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 2 (BW: 20MHz)	1RB	Front	18607	1850.7	0.160	0.728	100	1.00	20.69	21.00	1.074	0.782
		Back	18607	1850.7	-0.050	1.010	100	1.00	20.69	21.00	1.074	1.085
		Left	18607	1850.7	0.030	0.040	100	1.00	20.69	21.00	1.074	0.043
		right	18607	1850.7	-0.140	0.644	100	1.00	20.69	21.00	1.074	0.692
		Top	18607	1850.7	-0.150	0.679	100	1.00	20.69	21.00	1.074	0.729
		Bottom	18607	1850.7	0.100	0.020	100	1.00	20.69	21.00	1.074	0.021
	50%RB	Front	18607	1850.7	-0.080	0.617	100	1.00	20.69	21.00	1.074	0.663
		Back	18607	1850.7	-0.080	0.808	100	1.00	20.69	21.00	1.074	0.868
		Left	18607	1850.7	-0.060	0.032	100	1.00	20.69	21.00	1.074	0.034
		right	18607	1850.7	0.100	0.543	100	1.00	20.69	21.00	1.074	0.583
		Top	18607	1850.7	-0.020	0.559	100	1.00	20.69	21.00	1.074	0.600
		Bottom	18607	1850.7	-0.180	0.015	100	1.00	20.69	21.00	1.074	0.016

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 4 (BW: 20MHz)	1RB	Front	20300	1745.0	-0.010	0.197	100	1.00	21.21	21.50	1.069	0.211
		Back	20300	1745.0	-0.120	0.275	100	1.00	21.21	21.50	1.069	0.294
		Left	20300	1745.0	0.080	0.011	100	1.00	21.21	21.50	1.069	0.012
		right	20300	1745.0	-0.150	0.176	100	1.00	21.21	21.50	1.069	0.188
		Top	20300	1745.0	0.180	0.154	100	1.00	21.21	21.50	1.069	0.165
		Bottom	20300	1745.0	-0.190	0.004	100	1.00	21.21	21.50	1.069	0.004
	50%RB	Front	20300	1745.0	0.010	0.168	100	1.00	21.21	21.50	1.069	0.180
		Back	20300	1745.0	0.070	0.233	100	1.00	21.21	21.50	1.069	0.249
		Left	20300	1745.0	0.010	0.009	100	1.00	21.21	21.50	1.069	0.010
		right	20300	1745.0	-0.020	0.138	100	1.00	21.21	21.50	1.069	0.148
		Top	20300	1745.0	0.070	0.112	100	1.00	21.21	21.50	1.069	0.120
		Bottom	20300	1745.0	0.090	0.002	100	1.00	21.21	21.50	1.069	0.002

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 5 (BW: 10MHz)	1RB	Front	20407	824.7	0.140	0.664	100	1.00	19.97	20.00	1.007	0.669
		Back	20407	824.7	-0.010	0.960	100	1.00	19.97	20.00	1.007	0.967
		Left	20407	824.7	0.160	0.029	100	1.00	19.97	20.00	1.007	0.029
		Right	20407	824.7	-0.070	0.629	100	1.00	19.97	20.00	1.007	0.633
		Top	20407	824.7	0.110	0.517	100	1.00	19.97	20.00	1.007	0.521
		Bottom	20407	824.7	-0.160	0.013	100	1.00	19.97	20.00	1.007	0.013
	50%RB	Front	20407	824.7	0.050	0.532	100	1.00	19.97	20.00	1.007	0.536
		Back	20407	824.7	0.070	0.765	100	1.00	19.97	20.00	1.007	0.770
		Left	20407	824.7	0.080	0.025	100	1.00	19.97	20.00	1.007	0.025
		Right	20407	824.7	0.090	0.507	100	1.00	19.97	20.00	1.007	0.511
		Top	20407	824.7	0.090	0.472	100	1.00	19.97	20.00	1.007	0.475
		Bottom	20407	824.7	-0.080	0.006	100	1.00	19.97	20.00	1.007	0.006

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 7 (BW: 20MHz)	1RB	Front	21350	2560.0	0.060	0.155	100	1.00	20.74	21.00	1.062	0.165
		Back	21350	2560.0	-0.190	0.209	100	1.00	20.74	21.00	1.062	0.222
		Left	21350	2560.0	-0.110	0.006	100	1.00	20.74	21.00	1.062	0.006
		Right	21350	2560.0	-0.160	0.138	100	1.00	20.74	21.00	1.062	0.147
		Top	21350	2560.0	0.140	0.069	100	1.00	20.74	21.00	1.062	0.073
		Bottom	21350	2560.0	0.070	0.004	100	1.00	20.74	21.00	1.062	0.004
	50%RB	Front	21350	2560.0	-0.070	0.127	100	1.00	20.74	21.00	1.062	0.135
		Back	21350	2560.0	-0.040	0.165	100	1.00	20.74	21.00	1.062	0.175
		Left	21350	2560.0	-0.150	0.004	100	1.00	20.74	21.00	1.062	0.004
		Right	21350	2560.0	0.180	0.118	100	1.00	20.74	21.00	1.062	0.125
		Top	21350	2560.0	0.010	0.117	100	1.00	20.74	21.00	1.062	0.124
		Bottom	21350	2560.0	-0.030	0.002	100	1.00	20.74	21.00	1.062	0.002

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 12 (BW: 10MHz)	1RB	Front	23017	699.7	0.100	0.611	100	1.00	19.21	19.50	1.069	0.653
		Back	23017	699.7	-0.170	0.812	100	1.00	19.21	19.50	1.069	0.868
		Left	23017	699.7	-0.010	0.020	100	1.00	19.21	19.50	1.069	0.021
		Right	23017	699.7	-0.120	0.549	100	1.00	19.21	19.50	1.069	0.587
		Top	23017	699.7	0.030	0.340	100	1.00	19.21	19.50	1.069	0.363
		Bottom	23017	699.7	-0.090	0.005	100	1.00	19.21	19.50	1.069	0.005
	50%RB	Front	23017	699.7	0.170	0.480	100	1.00	19.21	19.50	1.069	0.513
		Back	23017	699.7	0.030	0.667	100	1.00	19.21	19.50	1.069	0.713
		Left	23017	699.7	-0.080	0.017	100	1.00	19.21	19.50	1.069	0.018
		Right	23017	699.7	-0.100	0.442	100	1.00	19.21	19.50	1.069	0.473
		Top	23017	699.7	0.100	0.288	100	1.00	19.21	19.50	1.069	0.308
		Bottom	23017	699.7	0.010	0.002	100	1.00	19.21	19.50	1.069	0.002

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 13 (BW: 10MHz)	1RB	Front	23230	782.0	-0.100	0.520	100	1.00	20.74	21.00	1.062	0.552
		Back	23230	782.0	-0.190	0.770	100	1.00	20.74	21.00	1.062	0.818
		Left	23230	782.0	0.020	0.019	100	1.00	20.74	21.00	1.062	0.020
		Right	23230	782.0	-0.150	0.453	100	1.00	20.74	21.00	1.062	0.481
		Top	23230	782.0	-0.160	0.385	100	1.00	20.74	21.00	1.062	0.409
		Bottom	23230	782.0	-0.130	0.005	100	1.00	20.74	21.00	1.062	0.005
	50%RB	Front	23230	782.0	0.090	0.406	100	1.00	20.74	21.00	1.062	0.431
		Back	23230	782.0	0.150	0.645	100	1.00	20.74	21.00	1.062	0.685
		Left	23230	782.0	0.110	0.015	100	1.00	20.74	21.00	1.062	0.016
		Right	23230	782.0	0.100	0.378	100	1.00	20.74	21.00	1.062	0.401
		Top	23230	782.0	0.170	0.329	100	1.00	20.74	21.00	1.062	0.349
		Bottom	23230	782.0	-0.150	0.002	100	1.00	20.74	21.00	1.062	0.002

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 17 (BW: 10MHz)	1RB	Front	23790	710.0	0.100	0.575	100	1.00	19.36	19.50	1.033	0.594
		Back	23790	710.0	-0.170	0.812	100	1.00	19.36	19.50	1.033	0.839
		Left	23790	710.0	-0.170	0.025	100	1.00	19.36	19.50	1.033	0.026
		Right	23790	710.0	0.000	0.457	100	1.00	19.36	19.50	1.033	0.472
		Top	23790	710.0	-0.170	0.346	100	1.00	19.36	19.50	1.033	0.357
		Bottom	23790	710.0	-0.160	0.006	100	1.00	19.36	19.50	1.033	0.006
	50%RB	Front	23790	710.0	-0.160	0.453	100	1.00	19.36	19.50	1.033	0.468
		Back	23790	710.0	0.000	0.656	100	1.00	19.36	19.50	1.033	0.677
		Left	23790	710.0	0.100	0.020	100	1.00	19.36	19.50	1.033	0.021
		Right	23790	710.0	0.110	0.390	100	1.00	19.36	19.50	1.033	0.403
		Top	23790	710.0	-0.060	0.296	100	1.00	19.36	19.50	1.033	0.306
		Bottom	23790	710.0	-0.110	0.003	100	1.00	19.36	19.50	1.033	0.003

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 25 (BW: 20MHz)	1RB	Front	26047	1850.7	-0.100	0.727	100	1.00	22.42	22.50	1.019	0.741
		Back	26047	1850.7	-0.160	0.978	100	1.00	22.42	22.50	1.019	0.996
		Left	26047	1850.7	0.010	0.019	100	1.00	22.42	22.50	1.019	0.019
		Right	26047	1850.7	0.080	0.575	100	1.00	22.42	22.50	1.019	0.586
		Top	26047	1850.7	0.190	0.458	100	1.00	22.42	22.50	1.019	0.467
		Bottom	26047	1850.7	-0.180	0.009	100	1.00	22.42	22.50	1.019	0.009
	50%RB	Front	26047	1850.7	-0.090	0.609	100	1.00	22.42	22.50	1.019	0.620
		Back	26047	1850.7	0.170	0.795	100	1.00	22.42	22.50	1.019	0.810
		Left	26047	1850.7	-0.130	0.015	100	1.00	22.42	22.50	1.019	0.015
		Right	26047	1850.7	0.150	0.492	100	1.00	22.42	22.50	1.019	0.501
		Top	26047	1850.7	0.020	0.407	100	1.00	22.42	22.50	1.019	0.415
		Bottom	26047	1850.7	0.180	0.003	100	1.00	22.42	22.50	1.019	0.003

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 26 (BW: 10MHz)	1RB	Front	26775	822.5	0.110	0.751	100	1.00	22.34	22.50	1.038	0.779
		Back	26775	822.5	-0.060	1.050	100	1.00	22.34	22.50	1.038	1.089
		Left	26775	822.5	-0.180	0.021	100	1.00	22.34	22.50	1.038	0.022
		Right	26775	822.5	0.130	0.611	100	1.00	22.34	22.50	1.038	0.634
		Top	26775	822.5	-0.150	0.585	100	1.00	22.34	22.50	1.038	0.607
		Bottom	26775	822.5	-0.110	0.015	100	1.00	22.34	22.50	1.038	0.016
	50%RB	Front	26775	822.5	-0.110	0.609	100	1.00	22.34	22.50	1.038	0.632
		Back	26775	822.5	-0.070	0.860	100	1.00	22.34	22.50	1.038	0.892
		Left	26775	822.5	-0.130	0.017	100	1.00	22.34	22.50	1.038	0.018
		Right	26775	822.5	0.000	0.500	100	1.00	22.34	22.50	1.038	0.519
		Top	26775	822.5	0.040	0.490	100	1.00	22.34	22.50	1.038	0.508
		Bottom	26775	822.5	-0.030	0.006	100	1.00	22.34	22.50	1.038	0.006

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 26 (BW: 10MHz)	1RB	Front	26797	824.7	0.160	0.755	100	1.00	22.24	22.50	1.062	0.802
		Back	26797	824.7	-0.150	1.050	100	1.00	22.24	22.50	1.062	1.115
		Left	26797	824.7	-0.030	0.043	100	1.00	22.24	22.50	1.062	0.046
		Right	26797	824.7	-0.120	0.695	100	1.00	22.24	22.50	1.062	0.738
		Top	26797	824.7	0.030	0.514	100	1.00	22.24	22.50	1.062	0.546
		Bottom	26797	824.7	-0.110	0.024	100	1.00	22.24	22.50	1.062	0.025
	50%RB	Front	26797	824.7	0.020	0.609	100	1.00	22.24	22.50	1.062	0.647
		Back	26797	824.7	0.070	0.872	100	1.00	22.24	22.50	1.062	0.926
		Left	26797	824.7	0.040	0.034	100	1.00	22.24	22.50	1.062	0.036
		Right	26797	824.7	-0.100	0.587	100	1.00	22.24	22.50	1.062	0.623
		Top	26797	824.7	-0.110	0.431	100	1.00	22.24	22.50	1.062	0.458
		Bottom	26797	824.7	-0.070	0.018	100	1.00	22.24	22.50	1.062	0.019

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 38 (BW: 20MHz)	1RB	Front	38150	2610.0	0.070	0.531	100	1.00	21.72	22.00	1.067	0.566
		Back	38150	2610.0	-0.060	0.683	100	1.00	21.72	22.00	1.067	0.728
		Left	38150	2610.0	0.110	0.021	100	1.00	21.72	22.00	1.067	0.022
		Right	38150	2610.0	-0.150	0.430	100	1.00	21.72	22.00	1.067	0.459
		Top	38150	2610.0	0.040	0.318	100	1.00	21.72	22.00	1.067	0.339
		Bottom	38150	2610.0	-0.170	0.006	100	1.00	21.72	22.00	1.067	0.006
	50%RB	Front	38150	2610.0	-0.080	0.448	100	1.00	21.72	22.00	1.067	0.478
		Back	38150	2610.0	0.140	0.578	100	1.00	21.72	22.00	1.067	0.616
		Left	38150	2610.0	-0.090	0.017	100	1.00	21.72	22.00	1.067	0.018
		Right	38150	2610.0	0.160	0.339	100	1.00	21.72	22.00	1.067	0.362
		Top	38150	2610.0	-0.160	0.253	100	1.00	21.72	22.00	1.067	0.270
		Bottom	38150	2610.0	0.010	0.003	100	1.00	21.72	22.00	1.067	0.003

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (db)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 41 (BW: 20MHz)	1RB	Front	40620	2593.0	-0.010	0.572	100	1.00	21.69	22.00	1.074	0.614
		Back	40620	2593.0	0.010	0.627	100	1.00	21.69	22.00	1.074	0.673
		Left	40620	2593.0	0.100	0.022	100	1.00	21.69	22.00	1.074	0.024
		Right	40620	2593.0	-0.170	0.405	100	1.00	21.69	22.00	1.074	0.435
		Top	40620	2593.0	0.060	0.375	100	1.00	21.69	22.00	1.074	0.403
		Bottom	40620	2593.0	0.080	0.019	100	1.00	21.69	22.00	1.074	0.020
		Back	39750	2506.0	-0.190	0.538	100	1.00	21.69	22.00	1.074	0.578
		Back	40185	2549.5	-0.080	0.567	100	1.00	21.69	22.00	1.074	0.609
		Back	41055	2636.5	0.070	0.543	100	1.00	21.69	22.00	1.074	0.583
		Back	41490	2680.0	-0.160	0.540	100	1.00	21.69	22.00	1.074	0.580
Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (db)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 41 (BW: 20MHz)	50%RB	Front	40620	2593.0	0.090	0.487	100	1.00	21.69	22.00	1.074	0.523
		Back	40620	2593.0	-0.070	0.512	100	1.00	21.69	22.00	1.074	0.550
		Left	40620	2593.0	0.140	0.019	100	1.00	21.69	22.00	1.074	0.020
		Right	40620	2593.0	-0.080	0.335	100	1.00	21.69	22.00	1.074	0.360
		Top	40620	2593.0	-0.060	0.257	100	1.00	21.69	22.00	1.074	0.276
		Bottom	40620	2593.0	0.090	0.015	100	1.00	21.69	22.00	1.074	0.016
		Back	39750	2506.0	-0.060	0.460	100	1.00	21.69	22.00	1.074	0.494
		Back	40185	2549.5	-0.170	0.473	100	1.00	21.69	22.00	1.074	0.508
		Back	41055	2636.5	0.080	0.437	100	1.00	21.69	22.00	1.074	0.469
		Back	41490	2680.0	-0.190	0.419	100	1.00	21.69	22.00	1.074	0.450

Mode	Channel Type	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
Band 66 (BW: 20MHz)	1RB	Front	132322	1755.0	0.180	0.908	100	1.00	21.91	22.00	1.021	0.927
		Back	132322	1755.0	0.180	1.230	100	1.00	21.91	22.00	1.021	1.256
		Left	132322	1755.0	0.050	0.037	100	1.00	21.91	22.00	1.021	0.038
		Right	132322	1755.0	0.170	0.729	100	1.00	21.91	22.00	1.021	0.744
		Top	132322	1755.0	-0.060	0.657	100	1.00	21.91	22.00	1.021	0.671
		Bottom	132322	1755.0	0.050	0.022	100	1.00	21.91	22.00	1.021	0.022
	50%RB	Front	132322	1755.0	0.170	0.769	100	1.00	21.91	22.00	1.021	0.785
		Back	132322	1755.0	0.150	0.971	100	1.00	21.91	22.00	1.021	0.991
		Left	132322	1755.0	0.080	0.031	100	1.00	21.91	22.00	1.021	0.032
		Right	132322	1755.0	0.190	0.675	100	1.00	21.91	22.00	1.021	0.689
		Top	132322	1755.0	0.150	0.642	100	1.00	21.91	22.00	1.021	0.655
		Bottom	132322	1755.0	-0.080	0.016	100	1.00	21.91	22.00	1.021	0.016

11.3.4 Results overview of WIFI

Mode	Position	Ch.	Freq. (MHz)	Power Drift (dB)	1g Meas. SAR (W/kg)	Duty cycle (%)	Duty cycle Factor	Meas. Power (dBm)	Max. tune-up power (dBm)	Scaling Factor	1g Scaled SAR (W/kg)
2.4g (2.4~2.4835) 802.11ax20	Front	1	2422	-0.180	0.103	100	1.00	20.97	21.00	1.007	0.104
	Back	1	2422	-0.110	0.041	100	1.00	20.97	21.00	1.007	0.041
	Left	1	2422	0.070	0.021	100	1.00	20.97	21.00	1.007	0.021
	Right	1	2422	-0.190	0.002	100	1.00	20.97	21.00	1.007	0.002
	Top	1	2422	0.080	0.023	100	1.00	20.97	21.00	1.007	0.023
	Bottom	1	2422	0.050	0.002	100	1.00	20.97	21.00	1.007	0.002

12 Multiple Transmitter Information

The SAR measurement positions of each side are as below:

< Rear Side >

Mode	Front side	Rear side	Left side	Right side	Top side	Bottom side
2G/3G/4G /5G Antenna	Yes	Yes	Yes	Yes	Yes	Yes
Wi-Fi/BT Antenna	Yes	Yes	Yes	Yes	Yes	Yes

1) Per KDB941225 D06v01r01, the DUT Dimension is bigger than 9 cm x 5 cm, so 10mm is chosen as the test separation distance for Hotspot mode. When the antenna-to-edge distance is greater than 2.5cm,such position does not need to be tested.

12.1 Simultaneous Transmission Possibilities

The Simultaneous Transmission Possibilities are as below:

Simultaneous Transmission Possibilities			
Simultaneous Tx Combination	Configuration	Body	Hotspot
1	GPRS/UMTS/LTE+Wi-Fi	YES	YES
2	GPRS/UMTS/LTE+BT	NO	NO

12.1.1 SAR Summation Scenario

Hotspot(body-worn 0mm)

Band	Test Position	Scaled SAR		Σ SAR (W/kg)	Llimit (W/kg)
		WWAN SAR 1g(W/kg)	WIFI2.4G SAR 1g(W/kg)		
GSM850 (GPRS 4slots)	Front	0.038	0.104	0.142	1.6
	Back	0.051	0.041	0.092	
	Left	0.002	0.021	0.023	
	right	0.031	0.002	0.033	
	Top	0.032	0.023	0.055	
	Bottom	0.002	0.002	0.004	
GSM1900 (GPRS 4slots)	Front	0.147	0.104	0.251	
	Back	0.160	0.041	0.201	
	Left	0.004	0.021	0.025	
	right	0.138	0.002	0.140	
	Top	0.109	0.023	0.132	
	Bottom	0.003	0.002	0.005	
WCDMA Band 2	Front	0.640	0.104	0.744	
	Back	0.717	0.041	0.758	
	Left	0.054	0.021	0.075	
	right	0.583	0.002	0.585	
	Top	0.355	0.023	0.378	
	Bottom	0.018	0.002	0.020	
WCDMA Band 4	Front	0.093	0.104	0.197	
	Back	0.120	0.041	0.161	
	Left	0.006	0.021	0.027	
	right	0.074	0.002	0.076	
	Top	0.079	0.023	0.102	
	Bottom	0.050	0.002	0.052	
WCDMA Band 5	Front	0.032	0.104	0.136	
	Back	0.042	0.041	0.083	
	Left	0.002	0.021	0.023	
	right	0.021	0.002	0.023	
	Top	0.026	0.023	0.049	
	Bottom	0.002	0.002	0.004	

Band	Test Position	RB allocation	Scaled SAR		Σ SAR (W/kg)	Llimit (W/kg)
			WWAN SAR 1g(W/kg)	WIFI2.4G SAR 1g(W/kg)		
LTE Band 2	Front	1RB	0.782	0.104	0.886	1.6
	Back		1.085	0.041	1.126	
	Left		0.043	0.021	0.064	
	right		0.692	0.002	0.694	
	Top		0.729	0.023	0.752	
	Bottom		0.021	0.002	0.023	
	Front	50%RB	0.663	0.104	0.767	
	Back		0.868	0.041	0.909	
	Left		0.034	0.021	0.055	
	right		0.583	0.002	0.585	
	Top		0.600	0.023	0.623	
	Bottom		0.016	0.002	0.018	
LTE Band 4	Front	1RB	0.211	0.104	0.315	
	Back		0.294	0.041	0.335	
	Left		0.012	0.021	0.033	
	right		0.188	0.002	0.190	
	Top		0.165	0.023	0.188	
	Bottom		0.004	0.002	0.006	
	Front	50%RB	0.180	0.104	0.284	
	Back		0.249	0.041	0.290	
	Left		0.010	0.021	0.031	
	right		0.148	0.002	0.150	
	Top		0.120	0.023	0.143	
	Bottom		0.002	0.002	0.004	
LTE Band 5	Front	1RB	0.669	0.104	0.773	
	Back		0.967	0.041	1.008	
	Left		0.029	0.021	0.050	
	right		0.633	0.002	0.635	
	Top		0.521	0.023	0.544	
	Bottom		0.013	0.002	0.015	
	Front	50%RB	0.536	0.104	0.640	
	Back		0.770	0.041	0.811	
	Left		0.025	0.021	0.046	
	right		0.511	0.002	0.513	
	Top		0.475	0.023	0.498	
	Bottom		0.006	0.002	0.008	
LTE Band 7	Front	1RB	0.165	0.104	0.269	
	Back		0.222	0.041	0.263	
	Left		0.006	0.021	0.027	
	right		0.147	0.002	0.149	
	Top		0.073	0.023	0.096	
	Bottom		0.004	0.002	0.006	
	Front	50%RB	0.135	0.104	0.239	
	Back		0.175	0.041	0.216	
	Left		0.004	0.021	0.025	
	right		0.125	0.002	0.127	
	Top		0.124	0.023	0.147	
	Bottom		0.002	0.002	0.004	

Band	Test Position	RB allocation	Scaled SAR		Σ SAR (W/kg)	Llimit (W/kg)
			WWAN SAR 1g(W/kg)	WIFI2.4G SAR 1g(W/kg)		
LTE Band 12	Front	1RB	0.653	0.104	0.757	1.6
	Back		0.868	0.041	0.909	
	Left		0.021	0.021	0.042	
	right		0.587	0.002	0.589	
	Top		0.363	0.023	0.386	
	Bottom		0.005	0.002	0.007	
	Front	50%RB	0.513	0.104	0.617	
	Back		0.713	0.041	0.754	
	Left		0.018	0.021	0.039	
	right		0.473	0.002	0.475	
	Top		0.308	0.023	0.331	
	Bottom		0.002	0.002	0.004	
LTE Band 13	Front	1RB	0.552	0.104	0.656	
	Back		0.818	0.041	0.859	
	Left		0.020	0.021	0.041	
	right		0.481	0.002	0.483	
	Top		0.409	0.023	0.432	
	Bottom		0.005	0.002	0.007	
	Front	50%RB	0.431	0.104	0.535	
	Back		0.685	0.041	0.726	
	Left		0.016	0.021	0.037	
	right		0.401	0.002	0.403	
	Top		0.349	0.023	0.372	
	Bottom		0.002	0.002	0.004	
LTE Band 17	Front	1RB	0.594	0.104	0.698	
	Back		0.839	0.041	0.880	
	Left		0.026	0.021	0.047	
	right		0.472	0.002	0.474	
	Top		0.357	0.023	0.380	
	Bottom		0.006	0.002	0.008	
	Front	50%RB	0.468	0.104	0.572	
	Back		0.677	0.041	0.718	
	Left		0.021	0.021	0.042	
	right		0.403	0.002	0.405	
	Top		0.306	0.023	0.329	
	Bottom		0.003	0.002	0.005	
LTE Band 25	Front	1RB	0.741	0.104	0.845	
	Back		0.996	0.041	1.037	
	Left		0.019	0.021	0.040	
	right		0.586	0.002	0.588	
	Top		0.467	0.023	0.490	
	Bottom		0.009	0.002	0.011	
	Front	50%RB	0.620	0.104	0.724	
	Back		0.810	0.041	0.851	
	Left		0.015	0.021	0.036	
	right		0.501	0.002	0.503	
	Top		0.415	0.023	0.438	
	Bottom		0.003	0.002	0.005	
LTE Band 26	Front	1RB	0.779	0.104	0.883	
	Back		1.089	0.041	1.130	
	Left		0.022	0.021	0.043	
	right		0.634	0.002	0.636	
	Top		0.607	0.023	0.630	
	Bottom		0.016	0.002	0.018	
	Front	50%RB	0.632	0.104	0.736	
	Back		0.892	0.041	0.933	
	Left		0.018	0.021	0.039	
	right		0.519	0.002	0.521	
	Top		0.508	0.023	0.531	
	Bottom		0.006	0.002	0.008	

Band	Test Position	RB allocation	Scaled SAR		Σ SAR (W/kg)	Llimit (W/kg)
			WWAN SAR 1g(W/kg)	WIFI2.4G SAR 1g(W/kg)		
LTE Band 26	Front	1RB	0.802	0.104	0.906	1.6
	Back		1.115	0.041	1.156	
	Left		0.046	0.021	0.067	
	right		0.738	0.002	0.740	
	Top		0.546	0.023	0.569	
	Bottom		0.025	0.002	0.027	
	Front	50%RB	0.647	0.104	0.751	
	Back		0.926	0.041	0.967	
	Left		0.036	0.021	0.057	
	right		0.623	0.002	0.625	
	Top		0.458	0.023	0.481	
	Bottom		0.019	0.002	0.021	
LTE Band 38	Front	1RB	0.566	0.104	0.670	
	Back		0.728	0.041	0.769	
	Left		0.022	0.021	0.043	
	right		0.459	0.002	0.461	
	Top		0.339	0.023	0.362	
	Bottom		0.006	0.002	0.008	
	Front	50%RB	0.478	0.104	0.582	
	Back		0.616	0.041	0.657	
	Left		0.018	0.021	0.039	
	right		0.362	0.002	0.364	
	Top		0.270	0.023	0.293	
	Bottom		0.003	0.002	0.005	
LTE Band 41	Front	1RB	0.614	0.104	0.718	
	Back		0.673	0.041	0.714	
	Left		0.024	0.021	0.045	
	right		0.435	0.002	0.437	
	Top		0.403	0.023	0.426	
	Bottom		0.020	0.002	0.022	
	Front	50%RB	0.523	0.104	0.627	
	Back		0.550	0.041	0.591	
	Left		0.020	0.021	0.041	
	right		0.360	0.002	0.362	
	Top		0.276	0.023	0.299	
	Bottom		0.016	0.002	0.018	
LTE Band 66	Front	1RB	0.927	0.104	1.031	
	Back		1.256	0.041	1.297	
	Left		0.038	0.021	0.059	
	right		0.744	0.002	0.746	
	Top		0.671	0.023	0.694	
	Bottom		0.022	0.002	0.024	
	Front	50%RB	0.785	0.104	0.889	
	Back		0.991	0.041	1.032	
	Left		0.032	0.021	0.053	
	right		0.689	0.002	0.691	
	Top		0.655	0.023	0.678	
	Bottom		0.016	0.002	0.018	

13 Measurement uncertainty evaluation

13.1 Measurement uncertainty evaluation for SAR test

The following table includes the uncertainty table of the IEEE 1528. The values are determined by SPEAG.The breakdown of the individual uncertainties is as follows:

DASY8 Uncertainty Budget According to IEC/IEEE 62209-1528 (Frequency band: 300MHz–3GHz range)								
Symbol	Error Description	Uncert. value	Prob. Dist.	Div.	(c_i) (1g)	(c_i) (10g)	Std.Unc. (1g)	Std.Unc. (10g)
Measurement System Errors								
CF	Probe Calibration	±13.3%	N	2	1	1	±6.7%	±6.7%
CF_{drift}	Probe Calibration Drift	±1.7%	R	$\sqrt{3}$	1	1	±1.0%	±1.0%
LIN	Probe Linearity	±4.7%	R	$\sqrt{3}$	1	1	±2.7%	±2.7%
BBS	Broadband Signal	±2.8%	R	$\sqrt{3}$	1	1	±1.6%	±1.6%
ISO	Probe Isotropy	±7.6%	R	$\sqrt{3}$	1	1	±4.4%	±4.4%
DAE	Other Probe+Electronic	±0.8%	N	1	1	1	±0.8%	±0.8%
AMB	RF Ambient	±1.8%	N	1	1	1	±1.8%	±1.8%
Δ_{sys}	Probe Positioning	±0.006 mm	N	1	0.14	0.14	±0.10%	±0.10%
DAT	Data Processing	±1.2%	N	1	1	1	±1.2%	±1.2%
Phantom and Device Errors								
LIQ(σ)	Conductivity (meas.)DAK	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%
LIQ(T_σ)	Conductivity (temp.)BB	±3.3%	R	$\sqrt{3}$	0.78	0.71	±1.5%	±1.4%
EPS	Phantom Permittivity	±14.0%	R	$\sqrt{3}$	0	0	±0%	±0%
DIS	Distance DUT – TSL	±2.0%	N	1	2	2	±4.0%	±4.0%
D_{xyz}	Device Positioning	±1.0%	N	1	1	1	±1.0%	±1.0%
H	Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%
MOD	DUT Modulation^m	±2.4%	R	$\sqrt{3}$	1	1	±1.4%	±1.4%
TAS	Time-average SAR	±1.7%	R	$\sqrt{3}$	1	1	±1.0%	±1.0%
RF_{drift}	DUT drift	±2.5%	N	1	1	1	±2.5%	±2.5%
VAL	Val Antenna Unc.^{val}	±0.0%	N	1	1	1	±0.0%	±0.0%
RF_{in}	Unc.Input Power^{val}	±0.0%	N	1	1	1	±0.0%	±0.0%
Correction to the SAR results								
C(ε, σ)	Deviation to Target	±1.9%	N	1	1	0.84	±1.9%	±1.6%
C(R)	SAR scaling^p	±0.0%	R	$\sqrt{3}$	1	1	±0.0%	±0.0%
u(ΔSAR)	Combined Uncertainty						±11.3%	±11.2%
U	**Expanded Uncertainty**						±22.6%	±22.5%

DASY8 Uncertainty Budget

According to IEC/IEEE 62209-1528

(Frequency band: 3GHz–6GHz range)

Symbol	Error Description	Uncert. value	Prob. Dist.	Div.	(ci) (1g)	(ci) (10g)	Std.Unc. (1g)	Std.Unc. (10g)
Measurement System Errors								
CF	Probe Calibration	±13.1%	N	2	1	1	±6.55%	±6.55%
CF_{drift}	Probe Calibration Drift	±1.7%	R	$\sqrt{3}$	1	1	±1.0%	±1.0%
LIN	Probe Linearity	±4.7%	R	$\sqrt{3}$	1	1	±2.7%	±2.7%
BBS	Broadband Signal	±2.6%	R	$\sqrt{3}$	1	1	±1.5%	±1.5%
ISO	Probe Isotropy	±7.6%	R	$\sqrt{3}$	1	1	±4.4%	±4.4%
DAE	Other Probe+Electronic	±1.2%	N	1	1	1	±1.2%	±1.2%
AMB	RF Ambient	±1.8%	N	1	1	1	±1.8%	±1.8%
Δ_{sys}	Probe Positioning	±0.005 mm	N	1	0.29	0.29	±0.2%	±0.20%
DAT	Data Processing	±2.3%	N	1	1	1	±2.3%	±2.3%
Phantom and Device Errors								
LIQ(σ)	Conductivity (meas.)DAK	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%
LIQ(T_σ)	Conductivity (temp.)BB	±3.4%	R	$\sqrt{3}$	0.78	0.71	±1.5%	±1.4%
EPS	Phantom Permittivity	±14.0%	R	$\sqrt{3}$	0.25	0.25	±2.0%	±2.0%
DIS	Distance DUT – TSL	±2.0%	N	1	2	2	±4.0%	±4.0%
D_{xyz}	Device Positioning	±1.0%	N	1	1	1	±1.0%	±1.0%
H	Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%
MOD	DUT Modulation^m	±2.4%	R	$\sqrt{3}$	1	1	±1.4%	±1.4%
TAS	Time-average SAR	±1.7%	R	$\sqrt{3}$	1	1	±1.0%	±1.0%
RF_{drift}	DUT drift	±2.5%	N	1	1	1	±2.5%	±2.5%
VAL	Val Antenna Unc.^{val}	±0.0%	N	1	1	1	±0.0%	±0.0%
RF_{in}	Unc.Input Power^{val}	±0.0%	N	1	1	1	±0.0%	±0.0%
Correction to the SAR results								
C(ε, σ)	Deviation to Target	±1.9%	N	1	1	0.84	±1.9%	±1.6%
C(R)	SAR scaling^p	±0.0%	R	$\sqrt{3}$	1	1	±0.0%	±0.0%
u(ΔSAR)	Combined Uncertainty						±11.6%	±11.6%
U	**Expanded Uncertainty**						±23.3%	±23.1%

13.2 Measurement uncertainty evaluation for system check

The following table includes the uncertainty table of the IEEE 1528. The values are determined by SPEAG.The breakdown of the individual uncertainties is as follows:

Uncertainty For System Performance Check								
Uncertainty Component	Tol. (±%)	Prob. Dist.	Div.	C_i 1g	C_i 10g	1g U_i(±%)	10g U_i (±%)	V_i
measurement system								
Probe Calibration	6.7	N	1	1	1	6.70	6.70	∞
Axial Isotropy	4.7	R	√3	0.7	0.7	1.90	1.90	∞
Hemispherical Isotropy	9.6	R	√3	0.7	0.7	3.88	3.88	∞
Boundary Effect	1	R	√3	1	1	0.58	0.58	∞
Linearity	4.7	R	√3	1	1	2.71	2.71	∞
system detection Limits	1	R	√3	1	1	0.58	0.58	∞
Modulation response	0	N	1	1	1	0.00	0.00	∞
Readout Electronics	0.3	N	1	1	1	0.30	0.30	∞
Response Time	0	R	√3	1	1	0.00	0.00	∞
Integration Time	0	R	√3	1	1	0.00	0.00	∞
RF ambient Conditions - Noise	1	R	√3	1	1	0.58	0.58	∞
RF ambient Conditions – Reflections	1	R	√3	1	1	0.58	0.58	∞
Probe positioned Mechanical Tolerance	0.8	R	√3	1	1	0.46	0.46	∞
Probe positioning with respect to Phantom Shell	6.7	R	√3	1	1	3.87	3.87	∞
Extrapolation, interpolation and integration Algorithms for Max. SAR Evaluation	2.0	R	√3	1	1	1.15	1.15	∞
Dipole								
Deviation of experimental source from numerical source	5.5	N	1	1	1	3.18	3.18	∞
Input power and SAR drift measurement	2.0	R	√3	1	1	1.15	1.15	∞
Dipole axis to liquid Distance	3.4	R	√3	1	1	1.96	1.96	∞
Phantom and Tissue Parameters								
Phantom Uncertainty (shape and thickness tolerances)	4.0	R	√3	1	1	2.31	2.31	∞
Uncertainty in SAR correction for deviation (in permittivity and conductivity)	2	N	1	1	0.84	2.0	1.68	∞
Liquid conductivity（meas.）	2.5	N	1	0.78	0.71	1.13	1.03	5
Liquid conductivity (target.)	5	R	√3	0.78	0.71	3.90	3.55	5
Liquid Permittivity（meas.）	2.5	N	1	0.23	0.26	0.33	0.38	∞
Liquid Permittivity (target.)	5	R	√3	0.23	0.26	1.15	1.30	∞
Combined Standard Uncertainty		Rss				11.29	11.18	
Expanded Uncertainty (95% Confidence interval)		k				20.57	19.95	

14 Test equipment and ancillaries used for tests

To simplify the identification of the test equipment and/or ancillaries which were used, the reporting of the relevant test cases only refer to the test item number as specified in the table below.

	Manufacturer	Device Type	Type(Model)	Serial number	calibration	
					Last Cal.	Due Date
☒	SPEAG	E-Field PROBE	EX3DV4	7895	2024-11-28	2025-11-27
☒	SPEAG	E-Field PROBE	EX3DV4	7391	2024-11-16	2025-11-15
☒	SPEAG	Validation Kits	D750V3	1151	2024-08-19	2027-08-18
☒	SPEAG	Validation Kits	D835V2	4d203	2024-08-20	2027-08-19
☒	SPEAG	Validation Kits	D1750V2	1143	2024-08-20	2027-08-19
☒	SPEAG	Validation Kits	D1900V2	5d211	2024-08-19	2027-08-18
☒	SPEAG	Validation Sources	D2550V2	1015	2024-08-16	2027-08-15
☒	SPEAG	Validation Sources	D3500V2	1164	2024-10-17	2027-10-16
☒	SPEAG	Validation Sources	D3700V2	1139	2024-10-17	2027-10-16
☒	SPEAG	Validation Sources	D3900V2	1106	2024-10-17	2027-10-16
☒	SPEAG	Validation Sources	D4600V2	1097	2024-10-17	2027-10-16
☒	SPEAG	Validation Sources	D4900V2	1093	2024-10-08	2027-10-07
☒	SPEAG	Validation Sources	D5GHzV2	1412	2024-10-17	2027-10-16
☒	SPEAG	Validation Sources	D6.5GHzV2	1116	2024-10-14	2027-10-13
☒	SPEAG	DAE	DAE4ip	1872	2024-10-18	2025-10-17
☒	SPEAG	Dielectric parameter probes	DAK-3.5	1363	2024-11-05	2025-11-04
☒	R & S	Universal Radio Communication Tester	CMU 200	119733	2024-10-21	2025-10-20
☒	R & S	Universal Radio Communication Tester	CMW500	144459	2024-10-21	2025-10-20
☒	R & S	UXM5G Wireless Test Platform	E7515B	MY60192341	2024-10-21	2025-10-20
☒	HP	Network Analyser	8753D	3410A08889	2024-10-21	2025-10-20
☒	HP	Signal Generator	E4421B	GB39340770	2024-10-28	2025-10-27
☒	Keithley	Multimeter	Keithley 2000	4014539	2024-10-28	2025-10-27
☒	SATIMO	Amplifier	Power Amplifier	MODU-023-A-0004	2024-10-21	2025-10-20
☒	Agilent	Power Meter	E4418B	GB43312909	2024-10-21	2025-10-20
☒	Agilent	Power Meter Sensor	E4412A	MY41500046	2024-10-21	2025-10-20

Annex A:System performance verification
(Please See the SAR Measurement Plots of annex A.)

Annex B:Measurement results
(Please See the SAR Measurement Plots of annex B.)

Annex C:Calibration reports
(Please See the Calibration reports of annex C.)

Annex D: Photographs
(Please see SAR test setup photos.)